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CHAPTER I

GENERAL

ORIGIN

The district now dealt with was organised for the first time in 1948. It was termed Halar as it formed part of one of the four Prants or sub-divisions of the Kathiawar Agency into which the peninsula of Kathiawar was subdivided by the British for political purposes. The Government of Saurashtra adopted these for naming the districts formed by it after integration. This district as originally organised included Class I State of Nawanagar, Class II State of Dhrol, taluka of Dhrafa and part of Jalia-Dewani Thana.

The origin of the term 'Halar' can, however, be traced to Jam Hala who crossed over from the north, entered Saurashtra and conquered the greater part of the territory held by the Jethwas of Ghumli. His descendant, Jam Raval consolidated his position by conquering further territories from the Jethwas and founded the kingdom of Nawanagar, Jam Raval came to be known as Halani as he was the descendant of Jam Hala, who named the territories he conquered 'Halavar', by contraction called 'Halar'. The district was renamed Jamnagar when Okhamandal of Amreli district formerly belonging to the Gaekwad of Baroda was added to it in the year 1959. The present district thus takes its name from the city and capital of Jamnagar so named after the rulers who styled themselves Jams. The term 'Jam', however, has a very interesting origin. The rulers of Jamnagar trace their origin from the great Yadav race of Lord Shri Krishna. According to the bardic tradition, king Devendra was 82nd from Shri Krishna. His elder son Aspat it is said courted Islam and became a Muslim. While this Aspat ruled over Egypt, his 3 brothers came to Afghanistan via Syria and Persia and founded there the city of Gazni. He installed his brother Narpat on the throne of Gazni with the title of Jam as a Muslim ruler was called at the time and himself came to India with his 15 sons. The title of Jam, which the Jadeja Rajputs of Nawanagar State have inherited is thus derived from their ancestor, Narpat.[1]

Location—Jamnagar district lies between 21° 47′ and 22° 57′ north latitude and 68° 57′ and 70° 37′ west longitude in the peninsular region in the north-west of Gujarat known as Kathiawar or Saurashtra. The district is bounded on the north by the Gulf and Rann of Kutch, on the east by

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1. [illegible] *Yaduvanshaprakash Ane Jamnagar no Itihas*, Jamnagar, [illegible]

Rajkot district, on the south by Junagadh district and on the west by the Arabian Sea.

Area and Population—The district measures about 128·75 km. from north to south and about 167·37 km. from east to west. The area of the district is 10,921 sq. km. The population of the district according to the 1961 Census was 828,419 of whom 424,300 were males and 404,119 females. The rural population of the district was 534,761 persons living in 701 villages as against the urban population of 293,658 spread over 15 towns of different sizes, of which Jamnagar (148,572 persons) is the only city with population over one lakh.

ADMINISTRATIVE HISTORY

The princely areas of Kathiawar integrated into the United State of Saurashtra were composed of diverse administrative units States, Estates, talukas, thanas and Girasdari areas. The entire administrative machinery had, therefore, to be overhauled and placed on a uniform footing on the formation of the Part-B State of Saurashtra after Independence by making 'district' the principal unit of administration.

The district of Jamnagar, originally constituted as Halar district, is not only recent in its origin but also in its modern set-up. But the region comprised therein is of great antiquity and dates back to Pre proto as well as ancient periods of history. According to Pauranik literature, Lord Krishna established his kingdom at Dwarka now in Jamnagar district after his migration from Mathura and it is to this great Yadava race that the Jams of Nawanagar and other Jadeja rulers of the adjoining areas trace their descent. Stone inscriptions of Rudrasinh and Rudradaman at Gondal in Halar and Mulvasar in Okhamandal testify to the suzerainty of the Shakas over this region about 181 A. D. The Gurulakas, the generals under the Guptas, also held this region. Later on the Saindhava rulers from Sindh established their kingdom in this region forming the western part of Saurashtra peninsula.

Nothing is definitely known about the administrative set-up in vogue during the early period except that this region was governed by their accredited representatives during the reign of the Kshatrapas, the Shakas and the Guptas. The Sindhavas had, it seems, an elaborate system of territorial subdivisions with a corresponding heirachy of officials entrusted with the preservation of law and order, protection of person and property, and collection of taxes.

At the time of Mahmud of Ghazni's invasion in 1024 A. D. the coastal belt was ruled by the Jethwas, probably a branch of the Jat or Jat tribe from the north as far as Khambhalia and Okhamandal and as far as Miani by

Chavdas. Sultan Mahmud Begdo conquered this region about 1480 A. D. Then during the troubled times following Humayun's conquest of Gujarat, the Jams who were Jadeja Rajputs established their own kingdom. Originating from Sammas who ruled at Nagar Thatha in Sind, the Jadejas first crossed over to Kutch and then from Kutch to Saurashtra. Jam Hala acquired a major part of Jamnagar district which he called Halavar. But it was his descendant Jam Raval who conquered Jodiya and Amran *parganas* from the Dedas and Chavdas, and the Khambhalia *pargana* from the Vadhels and founded Jamnagar in 1540 on the site of Nagnah Bandar which he took from the Jethwas, who had preceded the Jadejas in Saurashtra from Kutch and established a kingdom at Ghumli. The Jams thus enlarged and extended their territory and raised the stature of Nawanagar State by conquests over the Jethwas, Vadhels, Kathis, etc. They also came into frequent conflict with the Muslim rulers of Gujarat, the Viceroys of the Moghuls, and the Marathas, whose overlordship they constantly challenged and tried to shake off. During the British regime, Nawanagar enjoyed the position of a First Class State, till its merger in Saurashtra in 1948.

Okhamandal added later to form the present district of Jamnagar has a hoary past. The original inhabitants of Okhamandal, now a taluka of Jamnagar district, were the turbulent Vaghers. They seem to have descended from an ancient tribe called Kalas, who along with Modas, inhabited this region. The earliest known conqueror of Okhamandal was Shri Krishna who was succeeded by his great-grandson Vajranabh. After the decline of the Yadav power, the Kalas were again in control of Okhamandal from the middle of the second century till the sixth with an interval of the ascendency of two Syrian fugitives. By this time Kalas came to be known as Vaghers, whose predatory activities made them a source of constant trouble and threat to the peace of the Kathiawar peninsula. Between the middle of the 13th and beginning of the 19th century, Okhamandal passed into the hands of Hindu and Muslim rulers and was finally captured by the British, when the Vagher pirates captured a British vessel and threw an English couple overboard in 1804. As Dwarka and Beyt were regarded as holy places by Hindus, Okhamandal was handed over to the Gaekwad in 1817 in whose possession it continued till the merger of the Baroda State in 1949 and was finally included in Jamnagar district in 1959.

The administrative set-up in existence towards the close of the nineteenth century was essentially feudal and its organisation in the modern sense commenced only during the reign of Jam Vibhaji who introduced a number of administrative reforms in the State.

On the declaration of Independence of the country on August 15, 1947, Sardar Vallabhbhai Patel, the architect of modern India, ushered a new era of integration and consolidation of the princely States, which led to the formation of the United State of Kathiawar, later called Saurashtra. Before

1948 the entire Saurashtra peninsula was politically fragmented and administratively distributed into 222 States and Estates of various sizes and jurisdictions. The Government of Saurashtra was faced with the uphill task of evolving a unified system of administration in place of the feudal set-up in vogue till then. The administration of the new State was organised on modern lines by making 'district' the principal unit of administration.

THE DISTRICT

The Halar district which was constituted for the first time in 1949 after the merger of princely States into the State of Saurashtra consisted of the former Indian States of Nawanagar and Dhrol, Dhrafa Thana and part of Jalia Dewani, less Atkot, Paddhari and Kandorna talukas of the former Nawanagar State transferred to Madhaya Saurashtra (now called Rajkot district). The two enclave villages of Amreli district were also included in this district.

TERRITORIAL CHANGES

The statement that follows shows the constituent political units with their areas and population, etc., included in Halar district on merger.

States and Estates included in Halar district in 1949

Sl. No.	Component parts	Area in sq. miles and percentage of total in brackets	No. of villages	No. of towns	Population and percentage to total in bracket (1941 Census)
1	2	3	4	5	6
1	Nawanagar State	3,182.00 (91.18)	563	7	423,919 (91.81)
2	Dhrol State	164.60 (4.71)	34	1	22,713 (4.92)
3	Dhrafa Thana	96.90 (2.78)	25	..	12,295 (2.66)
4	Jalia Dewani	46.40 (1.33)	9	..	2,802 (0.61)
	Total	3,489.90	631	8	461,729

Source :
1. The Collector, Jamnagar district, Jamnagar
2. Nawanagar State, *Nawanagar Rajyani Vasti Ganatari*, 1941

The State of Nawanagar contributed as much as 91·18 per cent of its territories and 91·81 per cent of its population to the formation of Halar district. It was a Class I State next only in rank to Junagadh. Among other units, Dhrol was a Class II tribute paying State consisting of 71 villages of which 35 were included in Halar district. Like the Jams, the Dhrol Chiefs are also Jadeja Rajputs descended from Hardolji, the founder and brother of Jam Raval. Dhrafa was a separate tribute paying taluka of 25 villages; the Talukadars were Jadeja Rajputs, Cadets of Nawanagar. The Talukadars

of Jalia Dewani were the Bhayats of Dhrol, who exercised jurisdiction of the fifth class.

There was no change in the territorial jurisdiction of the district between 1951 and 1959. Under the States Reorganisation Act No. 37 of 1956, the district along with other districts of Saurashtra formed part of the composite State of Bombay from 1st November, 1956. After reorganisation several territorial changes were effected in practically all the districts of Saurashtra. Accordingly on 19th June, 1959 the boundaries of the district got substantially enlarged by the inclusion therein of the adjoining tract of Okhamandal, which formed part of the Amreli district of Bombay State, when Halar district was renamed Jamnagar. This district became part of the newly born State of Gujarat on the bifurcation of the composite State of Bombay, on 1st May, 1960. In 1961 the district consisted of 720 villages and 15 towns. There have been no new additions or transfer of villages to and from the district since then.

ADMINISTRATIVE DIVISIONS

Prior to 1947, the entire Saurashtra peninsula was parcelled out into various units, large and small, known as States and Estates without any uniformity either in their set-up or system of administration. Nawanagar and some of the salute States, however, had evolved a well-established system of administration. The State of Nawanagar was divided into three revenue divisions, viz., Central, Eastern and Western, further subdivided into mahals. When that State was integrated into the State of Saurashtra, the district became for the first time the principal unit of administration, organised on the basis of the neighbouring State of Bombay. On the formation of Gujarat as a separate State, the district was divided into 3 subdivisions, 6 talukas and 4 mahals. But the number of subdivisions was reduced to two, and reconstituted as under on the introduction of Panchayati Raj in the State in 1963.

STATEMENT I·1

Administrative divisions, as reconstituted on 30th June 1963

Sl. No.	Subdivision/taluka	No. of towns	No. of villages	Population (1961 Census)		
				Total	Rural	Urban
1	2	3	4	5	6	7
	District	15	720	828,419	534,761	293,658
	Jamnagar Subdivision ..	*5*	*195*	*352,725*	*167,126*	*185,599*
1	Jamnagar	3	101	255,970	87,975	167,995
2	Dhrol	1	41	35,310	25.527	9,783
3	Jodiya	1	53	61,445	53,624	7,821
	Khambhalia Subdivision	*10*	*525*	*475,694*	*367,635*	*108,059*
4	Khambhalia ..	2	96	81,972	53,140	28,832
5	Okhamandal ..	4	42	60,595	21,512	39,083
6	Kalavad	1	103	74,929	65,837	9,092
7	Jamjodhpur ..	1	79	77,586	63,788	13,798
8	Bhanvad	1	70	58,634	46,815	11,819
9	Lalpur	1	75	53,045	47,610	5,435
10	Kalyanpur	..	70	68,933	68,933	..

Source :

The Collector, Jamnagar district, Jamnagar

Physical Features

Configuration

Kathiawar peninsula of which Jamnagar district forms part was originally an island, quite unconnected with Gujarat and its present peninsular form is attributable to volcanic action. The physical features of the district also suggest that it forms part of what might once have been an island or group of islands of volcanic origin.

The topography of the district is uneven, broken at places by hill ranges, the Ran to the north and east and ranges of sand dunes along the coast to the north and west. The plain terrain has an average height of 250 feet in Lalpur and 150 to 200 feet in Khambhalia. The Dwarka cliffs rise sheer off the sea to a height of 100 feet while the Okha Ran is a low lying marshy area. The Barda hills project into the district making Bhanvad taluka extremely hilly. The talukas of Jamjodhpur, Kalavad and Lalpur are partly hilly and partly plain terrain. The coastal track of Jodiya, Jamnagar, Khambhalia and Okhamandal are covered by water during high tides and are very low lying territories.

The highest peaks are the Barda hills in the south-west where they reach up to a height of 2,000 feet. Although the Barda hills appear to be part of the central highlands of Saurashtra, they are actually isolated from both the north-eastern and south-western series. The Gop hills also stand isolated from the central massif and reach to a height of 1,191 feet. The hills being scattered in the several talukas, the plain area is not continuous nor uniform in height. The south-west and the central-north are higher while the land gradually sinks to the north-east and west.

Of the hill ranges, the Barda, the Alech, the Dalasa and the isolated hill of Gop, Mount Venu, the highest summit of Barda, is 2,057 feet and Mount Abhipura 1,938 feet, while Gop attains 1,191 feet. The Dalasa and Alech ranges nowhere reach 1,000 feet. Barda hills form a circular cluster about 48 km. in circumference and are visible from a distance of from 40 to 48 km. From the north they appear grouped in three distinct peaks. The portion of the Barda range lying in the Bhanvad taluka of the district is, however, clothed in excellent forest, though the trees nowhere attain any very great size. The physical aspect of the district, however, varies in different talukas. Jamnagar, Jodiya, Khambhalia and Kalyanpur are mostly level country. Jamjodhpur and Lalpur talukas are hilly, while Bhanvad is exceedingly hilly and in part mountainous. Dhrol is undulating and not relieved by any continuous mountain chain. Okhamandal in the north-west corner is bounded on the north by the Gulf of Kutch, on the west by the Arabian Sea, and on the east and south by the Ran or salt marsh that separates it from the district. The Ran is formed by an inlet of

the sea from the Gulf of Kutch, running south-west to the village of Madhi on the seacoast, about 19 km. south of Dwarka. The Ran at Madhi was formerly open to sea but it is now closed by the formation of a sand bar across its mouth. The length of the Ran is about 26 km. and the breadth ranges from 8 km. at the north end to about 1 km. at the south. The bed of the Ran is generally dry at neap tides, but it is covered with water to a depth, in some places, of sixteen inches during the spring tides. It is always fordable except after a heavy fall of rain. The physical aspect of Okhamandal is dull, and generally undiversified verdureless plain. The prevailing features are a few isolated hills and hillocks cropping up unpicturesquely over the land. Extensive patches of *thur* jungle and tangled brushwood are scattered over the surface, and low continuous ranges of dunes or sandbanks run along the north and west coasts.

The district can be divided into three physical regions (1) the Coastal Plain including the Islands off-shore (2) the Plain (3) the Hills.

HILLS

The principal hill ranges are the Barda hills, and the isolated hill of Gop, Mount Venu, the highest summit of Barda hills is 2,057 feet.

The Barda Hills

A highway connects Jamnagar to the Kileswar rest-house in the Barda hills. Stretching to about 16 km. north-south and 11 km. east-west, the Barda hills cover an area of 181·30 sq. km. the northern parts of which lie in Jamnagar territory. It contains porphyritic quartz bearing felsite, more common in the northern half than in the southern. The rocks have the appearance of having undergone change of partial decomposition. They contain free quartz in abundance, some at least of which are secondary product. They are very similar to the gnessic looking rocks on the west ridge of Junagadh hills. In the southern half the rocks are similar but besides the crystals of quartz there is another vitreous constituent, the colour of amber and below quartz in hardness. There is also a third variety, a pale grey trachytic ash which contains a decomposed wax-green soapy mineral. These rocks weather into huge spheroidal or boulder like masses piled upon one another making the scenery quite spectacular. In the neighbourhood of Ghumli a very tough granular quartz felsite prevails. There are extensive ruins of temples in Ghumli, a former capital of the Jethwas with exquisitely carved stones derived from these hills.

Besides Venu there are several other peaks in the Barda hills of Jamnagar territory. South of Ranpur a peak rises to 1,947 feet, while another peak reaches a height of 1,778 feet. Some temples adorn these peaks.

The Barda hills stand isolated from the north-eastern and south-western series of hills as well as the central highlands of Saurashtra. In the last century they were thickly forested, when Jam Ranmalji used to hunt lions in Barda. But there are no lions now in Barda.

The Gop and Other Hills

The Gop hills, also quite isolated, reach a height of 1,191 feet. They rise sheer off the plain. Close to the hills there are two villages Mohota and Nahana Gop. Nahana or little Gop is famous for one of the most ancient temples, to which Mr. Burgess assigns a date not later than 6th century in his Report on the antiquities of Kutch and Kathiawar, p. 187.[1] Several scattered hills can be seen in south Lalpur joining up with the central highlands at Ghela, Tebhda, Dhunada, Kotha Virdi, Sanosra, etc. Apart from these hills the southern part of Jamnagar, Kalavad and Lalpur talukas are quite hilly. East of the Ranjit Sagar, the land rises to 250 and 260 feet. South of the lake there is a cluster of hills from which the Rangmati and Nagmati rivers rise. These hills have peaks of varying heights of 651, 776 and 558 feet. At Lambhodhar the height is 618 feet, at Panchasar 559 feet and at Kharba 634 feet. North-west of Lalpur and west-north-west of the Jamnagar highway are two ridges which throw a few hillocks to the villages of Babarzar and Devalia. A few scattered hills are seen in the southern part of Khambhalia near Keshod, Piparia, Thakar Sherdi, Khokhri, Lalooka, Fot, Gundala, etc. About 3 km. north-east of Bhatia railway station is a round hillock rising to a height of 252 feet and another, almost a perfect oval in shape, some 6 km. south of Bhopalka railway station, which reaches a height of 302 feet. The Dhebar hills on the north side of the Barda hills consist of dull coloured crypto-crystalline or minutely granular felsite.

Okhamandal

The traps come down right up to the shore from where they trend in a very irregular and tortuous line north and west to the shore of the Gulf of Kutch including Okhamandal. Okhamandal is covered by tertiary and higher rocks. Of these the Gaj beds prevail on the mainland while an overlying series possibly of later age than tertiary occupies the major portion of Okhamandal. There are some small inliers and outcrops along the eastern side of Okhamandal.

Okhamandal is separated from the rest of Jamnagar by the Okha Ran. Along the west of the Okha Ran are seen Gaj beds and there is a remarkably large variety of Ostrea Multicostata in the soft arenaceous clays exposed in some creeks in the Okha Ran. North and south of the Okha Ran almost hugging the Arabian Seacoast are two hillocks. The southern one is south of the Khara Khetar lake and is 105 feet high lying on a line with the coast, about 1.6 km. to the interior. The northern hillock stands south of Mealpur

1. WATSON, J. W., *Statistical Account of Nawanagar State*, 1879, p. 48

village and a lake stands at the foot of the hill. Both the railway and the highway from Jamnagar to Dwarka run along the east of the lake.

In Dwarka, the rocks consist of various lithological character and though the total thickness is considerable it may be possible to eventually divide the beds into sub-groups. The rocks now go under the general name of the Dwarka beds. They are for the most part unfossiliferous though some beds are composed entirely of organic fragments such as pounded shells and corals. The lower beds of this group are yellow, soft and earthy or clayey and gypseous and sometimes strongly stained by iron with a few thin bands of harder rock. The reddish yellow soft earthy or marly clay beds occupy the low lying parts of southern Okhamandal and extend to the south-east into the low hills near the coast. The higher part of southern Okhamandal and spreading throughout the north are lime-stones, more or less marly and arenaceous, seldom very compact and more generally porous. They occur as thick flaggy beds some of which are made up almost entirely of small organisms with the inter-spaces filled up with crystalline matter mostly calcite.

In Beyt island and along the northern coast of Okhamandal marly clays and arenaceous marlstone prevail together with sandstone. At Positra a buff lime-stone more or less marly or crystalline prevails. It also prevails southwards into the plains of Mulvasar. The coastal fringing hills of Dwarka consist of porous or open or in the part compact lime-stones pale yellowish in colour, gritty with quartz and finely crystalline. These rocks form the low cliffs of Dwarka and extend along the coast for some distance. They also form an outlying ridge of hill about 8 km. inland from Varvala bearing from the village of Dhrasanvel northward through Gadhechi through the low country around Arambhada at which place lime-stones are met with at nearly sea level. The cliffs of Dwarka show about 20 to 30 feet of bed varying from impure lime-stone to ragstone. Near the top the lime-stone is purer though still gritty with quartz grains and shelly fragments.

Extensive rock plains are seen in the whole of Jamnagar area. The rock of these parts is bedded trap mostly decomposed and crumpling. Yet the surface of the country is almost as level as that of an alluvial plain. The plaining down of such material could not have been effected by sub-aerial denudation but by a gradually encroaching sea. Some peaks which have resisted weathering stand up isolated here and there and they are seen sometimes up to the coast. The Balachadi hill mentioned later is a small conical hill about 120 feet high and to the west of the village of Balachadi the rocks abut into the Gulf.

The Coastal Plain

Jamnagar district has roughly about 351 km. of coast of which 93 km., from Meda creek to Okha Tidal Station, are washed by the Arabian Sea

in the west, while about 258 km. of the coast front the Gulf of Kutch in the north.

The Arabain Seacoast rises sheer off the sea and is a faulted coast. The land here rises from 84 to 108 feet. At Okha point it is about 52 feet above sea level. The Barda hills are not very far from the coast. The Arabian coast of Jamnagar differs from the rocky coast north and south of Bombay and somewhat resembles the coast at the head of the Arabian Sea. Parts of it are salt charged, while near Okhamandal it is a sandy waste. The coast is generally flat and fringed with a line of wind blown sand hills. There are few foreshore cliffs and muddy stretches broken up by small creeks. Except for the Dwarka inlet, there are very few inlets of note on this coast. On the whole it presents a remarkably straight and unbroken line which slopes from the central highland towards the margin. It is fringed with low parallel ridges of consolidated shore deposits and sand hills.

The Gulf coast on the other hand is a built up coast. Marshes, sand and mangroves are common features of this coast, alternating with rocky buttresses and islands in the Gulf.

A variety of deposits, marine, estuarine, fresh water and sub-aerial are found in the Gulf coastal plain. Raised coral reefs border the Gulf of Kutch and marine concretes with oyster beds extend beneath the alluvial soil almost throughout the northern plains. They are exposed along the coast of the Gulf. The whole sea facing the Gulf of Kutch from Jamnagar westwards including the islands off the coast is fringed with dead coral reefs. In some places the coral floor extends inland up to high tide level as at Salaya. The coral has a very fine uniform texture and has been worked as a substitute for building stone but not with very satisfactory results owing to salt impregnation. The existence of dead coral reefs prove that the country has been rising during late times. Dead oyster beds also indicate upheaval.

One of the highlights in the development for fisheries in the district is the pearl fishery. The pearls are collected from oysters *Pterialvulgaris*, found on the Jamnagar coast attached to the coral reefs locally known as 'Kada'. In all 42 such reefs, totalling about 60,000 acres are situated on this side of the Gulf of Kutch. Not all of them are productive. Fishes from which oil can be extracted are also available.

The long coast of Jamnagar has three intermediate ports, namely, Bedi, Sikka and Okha and six non-intermediate ports, namely, Jodiya, Salaya, Pindara, Lamba, Dwarka and Beyt. Of the non-intermediate ports only Jodiya and Salaya have foreign traffic. The others are only coastal ports. All the three intermediate ports have both coastal and foreign traffic. The ports of Jamnagar belong either to the Bedi or Okha group of ports. The

latter group was formerly in the Okhamandal district of the former Baroda State.

Some of the mangrove islands and the coastal areas yield good firewood and timber which are exported from the ports.

THE GULF COAST

The Gulf coast can again be subdivided into five stretches, viz., from (i) Okhamandal point to Dhani, (ii) Dhani to Nawanagar (Jamnagar), (iii) Jamnagar to Balachadi, (iv) Balachadi to Jodiya and (v) Jodiya to Hansthal. These stretches present their own individuality and are described below.

(i) From Okhamandal Point to Dhani

The coast between Vomani or Okhamandal point and Dhani is covered with reefs and islands with good channels between them, most useful for coasting crafts. Except for a few isolated hillocks the physical aspect of the Okhamandal coast is dull and monotonous. Low continuous dunes or sandbanks run along the coast on the north and west. Dwarka, besides being a pilgrimage centre is also a small town and port with a population of 14,314 (1961). It is a non-intermediate port with only coastal traffic. Positra point is nearly six km. south-east of Beyt. Positra village is situated on high ground nearly 3 km. south-west of the point. Positra harbour can afford a deep shelter harbour within a kilometre of the mainland of Okhamandal. The sandy points of Okha shore can be seen in a line. The first one at Okha is Okha point which is in five to seven fathoms and the other is Vomani point 1·6 km. to the south-west. Okha is a port and town with a population of 9,630 (1961).

(ii) From Dhani to Nawanagar (Jamnagar)

From Nawanagar to more than 48 km. west the mainland of Jamnagar falls back from six to ten km. within the sea face of the reefs which bound the coast. Except two or three hills which are land-marks for sea going vessels there are no distinguishable objects but clumps of mangrove trees are seen on the reefs.

South-west of Pirotan island lies the entrance to Sarmat inlet, between reefs a little more than a kilometre wide, within the entrance are some rocky patches.

Sikka inlet is 3 km. west-south-west of Dera sand-hills and is navigable for six or eight km. at low water. At high water large vessels can pass through. Sikka is now an intermediate port in the Bedi group of ports.

Nalia, a clump of trees with a sandbank stands about 13 km. south-west of Dera. The reef extends off it to the north where the rocks are highest. a mangrove swamp joins Nalia to the mainland making the coast sandy and marshy.

The Salaya inlet is about six km. from the Kalumbhar island. It lies between Kalumbhar and Dhuni. Salaya is a good port being the landing place for Khambhalia, about ten km. south-south-east. It has a perfectly sheltered harbour. It attracted the attention of European merchants not only because of its good harbour but also because of its cotton-rich hinterland. The ruler of Nawanagar at that time was no favourite of the British. Little was done to improve the harbour during the early British days and later trade was concentrated in Bombay. But Salaya inlet at its entrance has as great a depth at low water as Mersey at Liverpool at high water. It is one of the best ports in Western India and its hinterland is richer than that of Kandla. Between Kalumbhar and Dhani, which is the entrance to Salaya, the water is ten fathoms deep and this depth can be maintained at all seasons. Salaya is now a non-intermediate port with both coastal and foreign traffic.

(iii) From Jamnagar to Balachadi

Between Jamnagar and Balachadi the shore is muddy, fronted with coral reefs and banks. But about a kilometre to the north-west of the village of Balachadi is a small round conical hill on top of which is the shrine of Aku Pir. About a kilometre, on the west of the village there is a range of rocky hills about sixty to eighty feet high jutting into the Gulf. They stretch north and south for over a kilometre. In the British days this was developed as a health resort for officers residing at Rajkot. These hills are covered at high water. Between these hillocks and the conical hill of Aku Pir, there is a small creek off the mouth of which are mud banks. Behind Balachadi shoal waters stretch for more than 8 km. west.

Jamnagar stands about 157 feet above sea level. Its fort can be seen from the Gulf on clear days at 32 km. distant.

Bedi, the port of Jamnagar, is a little town and fort standing 4 km. north-west of Jamnagar with a population of 10,645 in 1961. Boats can come to Bedi creek within a kilometre from the town. The mouth of the creek is about 3 km. from the anchorage off Jamnagar and nearly 1·6 km. north-west of Rozi. Its west side is rocky and its east side is muddy. Bedi is an intermediate port.

Rozi is two or three fathoms at low water and is well sheltered from west winds. The rise and fall of tides here is 18 feet in high springs, 16 feet at ordinary springs and 10 feet at neaps. The bottom of the creek is muddy and soft. This and the rocky patches north-west of Rozi and east of Pirotan island obstruct navigation to Rozi.

(iv) From Balachadi to Jodiya

Beyond the hills of Balachadi the coast becomes sandy and marshy. South of Jodiya for nearly 1·6 km. is a mangrove. Jodiya stands on low sandy land. The landing at Jodiya is 4 km. north-west of the old fort. The entrance to Jodiya creek is among mangroves and is about 1·6 km. distant. Boats coming to Jodiya run round the east of Mongra reef and they can come up only after the floods. The rise and fall of tides here is about sixteen feet at ordinary springs, nine or ten at neap and 18 and 19 at highest springs. Jodiya is now a non-intermediate port with both foreign and coastal traffic.

(v) From Jodiya to Hansthal

This part of the coast is one long mud-flat covered with mangroves on which camels may sometimes be seen. Off Jodiya is the Mongra reef to the north-west. Hansthal bears north-east by north, nearly 16 km. from Mongra reef. At low water the mud becomes dry between them.

ISLANDS, SANDBANKS AND REEFS

Off the coast of Okhamandal there are several reefs and islands with good channels between them for coasting crafts when there is a swell outside the Gulf. During heavy breezes the boats can be steered in without difficulty.

The Great Baral or Chanka reef, the north face of which is 16 km. long is a coral reef. The north end of the reef forms a full semi-circle with a radius of 2·4 km. round Chanka island. After the first quarter ebb the rocks at the margin begin to show themselves. This vast coral reef surrounds four islands, namely, Chanka, Nora, Bhaidar and Chusra. It is completely covered at high water and only the four islands are visible. The north face of the reef is very steep, the sounding here being 20 to 36 fathoms and the tide rushes by with a velocity of four to six knots. Off the north-east of the Baral reef is a shoal, some fifteen to nineteen fathoms deep on which rocky patches of seven and eight fathoms are seen. The bank extends some 16 km. north-east of Chanka island. Chanka is the north-eastern most of the four islands on the reef and is also the smallest.

Nora is a large low mangrove island on the Baral coral reefs some 4 km. west of Chanka. It extends 5 km. from west to east. Its north face is fronted with sand. To the north of Nora the Baral reef is deeply indented and the soundings near the reef are mostly mud.

Bhaidar, the third island on the reef, is a mangrove island nearly 3 km. across. Its west face is fronted with sand. The highest part of the island, which stands twenty feet above high water, is the north-west, which, along with the west front, is quite sandy. Bhaidar lies 5 km. south-west of Nora

and about half way between Nora and Chusra (Chusda). 8 km. west of the island of Bhaidar is the Paga reef.

Chusra (Chusda) is a small rocky islet and stands 4 km. south-west of Bhaidar. It makes the south extreme of Baral reef as it is only three cables length within the south point of the Baral rocks.

The north-west extreme of the Baral reef stretches nearly 10 km. to the west of Nora and 12 km. north of Chusda. The rocks at the edge are piled up in three places which are dry after high water springs and are scarcely covered at neaps. It forms an excellnt shelter for vessels from the north-west wind. The anchorage is about four fathoms deeps.

A fifth island in this group but not on the Chanka or Baral reef, is Ajar. The north end of Ajar island almost touches the Chusda island. All these islands are raised very little above the sea and are mere banks of hard rocks on which sand has gathered. They were important for their beds of pearl oysters which used to be gathered without difficulty and without diving. The pearls were also of good quality and lustre.

The Paga or the Turtle reef lies 10 km. north of Chusra and about 8 km. west of Bhaidar allowing a passage of 1·6 km. broad between it and the Baral coral reef. Its greatest length is nearly 6 km. east and north-west. On its west side there is a bank of sand which is completely covered only at high water springs and forms a good landmark. This sand heap lies about 5 km. east of the east end of Beyt island. Okhamandal tableland is to the south-east and can be seen from the Paga sandbank between the Brother islands. This is a mark which keeps vessels free of the south-east extreme of the Paga reef and enables them to steer safely to Beyt. The north lip of the reef which never shows above water lies 5·6 km. to the east of Chunri reef.

The Chunri reef is about 3 km. north of Beyt island. It has also a sand heap, covered only at high springs on its south side. It lies 7 km. from Paga reef. The part of the reef that dries stretches more than a kilometre and the shoal water stretches nearly 3 km. to the north of Paga sand. The east extreme of the shoal water stretches 3 km. from the sandy reef. To the south of the Chunri sand the reef is deep to and there is a passage of 1·6 km. wide between it and the rocks of Beyt island. Between it and the Saiani island there is shoal water with overfalls from three to eight fathoms.

The Gurur sand and shoal on which the depth ranges from ten to three and a half fathoms stretches over a length of 16 km. north-east and south-west of the Saiani island to the north side of the Beyt inner harbour. Saiani island has a sandy spit stretching 1·6 km. to the north-west. In the middle of the island are the ruins of the tomb of Saiani Pir. The Gurur has also a sandy knoll called Beka, just dry at the lowest spring tide. Its north-east

end is 8 km. from the mainland. The depth between Gurur shoal and the shore reef varies from 12 to 20 fathoms, the bottom being sand and shells. The south end of Gurur shoal is joined with the shoal water off Chora sand-hills by a shallow neck having ten fathoms water with much deeper water on either side. The depths are very unpredictable and deceiving. Between Gurur shoal and the calm on the ebb side tide there are heavy ripples making navigation difficult. The colour of the water changes where the ripples are and great patches of drifting seaweeds can be seen to point out the danger spot during the day. The passage between Gurur shoal and Okhamandal is good. It is 5 km. wide. From Dwarka the tides are strong in and out of the Gulf setting with the line of the coast.

Lushington shoal called also Ania Mor is a shoal patch of sand and rock, the sand brought by currents from Kutch and Sind and deposited on the rock nucleus when the ebb from the Gulf of Kutch conflicts with the south-east ocean currents driven by the south-west monsoon. This is supposed to be gradually shoaling. A ten fathom bank extends from Lushington shoal some 26 km. south-west. In the west are eight fathom shoals. Between Lushington shoal and Ranvada shoal is a deep channel of 30 to 35 fathoms.

Babasir rock lies about one kilometre from the edge of Chanka. Between it and Chanka there is a sheltered anchorage in five fathoms mud, about a kilometre south-west of Babasir. To the north of it is another anchorage in eight or nine fathoms. This used to be a good shelter for boats plying between Dwarka and Karachi. Rain seldom falls here and the shore is not completely hidden as at Bombay. In the day time the coast can be seen and a vessel can safely go to the north or south of Beka shoal. From there it could run into the sheltered anchorage behind Chanka after passing the Chusri reef. Beyond this reef, because of the south-west wind it is impossible to move up to Hanuman-danda and take the anchorage east of Beyt island without tacking. In the days when boats depended entirely on a favourable wind for sailing this anchorage was difficult. The safer passage was to Chanka and Nora but these also could be reached only with difficulty and in high water. The boats could anchor only 5 km. off what is visible of the islands of Chanka and Nora. Large vessels from Malabar and Arabian coast used to take shelter on the leeward side of Chanka after the beginning of the monsoon and there discharge their cargo to smaller boats which used to take the goods to Kutch-Mandvi. None of these islands are now used.

Between Babasir rock and Dhuni fringing reef, 8 km. to the south-east the water is not deep. The bottom is generally mud, though a few patches of hard ground are found. The local boatmen are well acquainted with the most minute channels, eddies and tides between the islands in the Gulf. No complete survey of the Gulf has been done since 1885.

Situated in the Gulf of Kutch about 5 km. north of mainland of Okhamandal and to the east of Okha port, Beyt or Shankhoddhar island is a narrow crooked strip of sand and rock about 13 km. long. It is famous for its temples and shrines dedicated to Krishna, chief of which was in the fort of Kalakot. It is named Shankhoddhar as its shape resembles a conch shell which is found extensively on its shores, but more probably after the victory of Lord Vishnu over the demon Shankhasur in the Matsyavatar. Raman-dwip is its another name.

The east end of Beyt or Sankhoddhar is composed of sand-hills and bushes and is called Hanuman point as there is a temple to Hanuman a kilometre within that point. The reef north of this point is called Hanuman-danda and extends west for 2 km. to the north-east of the sand-hills that border the north side of Beyt. The island from north-east to south-west measures 8 km. but being a narrow and crooked piece of land, is, in its windings, about half as long again. Its south-west half is rocky tableland fifty or sixty feet high. A boat can reach Hanuman point without difficulty from the south side of the Chunri reef. From Hanuman point going south-east and south the Kiu hills begin to appear to the left of the point. Beyond this, keeping clear of the ebb, which will force the boat west against Hanuman point, it can anchor safely at Beyt. The anchorage off the east end of Beyt island is well sheltered from westerly gales, and, approached as above, may be had in five or six fathoms mud rather more than a kilometre from the shore, with Hanuman point to the north-west and Chunri sand to the south-west. To the east of Beyt, anchorage is rocky but near the island the water is smooth. Beyt is now a port in the Okha group of ports in Saurashtra. It is a non-intermediate coasting port.

Between the sandy south-east side of Beyt island and the mainland of Okhamandal the passage is very shallow having a bank in mid-channel which is nearly dry at low tides. The water deepens towards the south of the island but the many sunken rocks make it unsafe for navigation. Only the local pilots know anything about the channels. Beyt inner harbour is unfit for large vessels because of the rocks. There are several channels to Beyt at high water. The passage round the east side of Saiani island is the best as the rocky point shows plainly. The Beyt bar with the east sandy point of Okhamandal is in line with Beyt. Here is more than four fathoms towards high water. The tides also increase in velocity near Beyt where it increases from 2 to 3 knots at Dwarka to 3 and 4 knots.

Positra point is nearly 6 km. south-east of Beyt. There is a sunken reef 1·6 km. north of the point and to the east of it is foul ground called Boria. It is covered only towards high water. This part marks the extreme east of the reef. A separate little reef lies north, between which and the Paga reef the fair channel is 2 km. broad. To the south-east can be seen the mainland of Okhamandal and to the north the Kiu hills.

The Brother islands also called Shan lie 4 km. south-east by south of Positra point. The western island Dabdaba is large and flat-topped about sixty feet above sea-level. The eastern island Devdi is small and conical. There is good anchorage a kilometre east of the Brother islands and also on the west in 6 to 10 fathoms mud and sheltered from all winds. Positra can afford deep shelter harbour within a kilometre of Okhamandal but no vessel calls at this port now.

The Panera island stands in a five fathom patch south-west of Dhani beyt. It is a mangrove island almost an oval, stretching about 3 km. east-west and a kilometre north-south. The shoal on which it stands stretches to about 6 km. north of the island. The island is on the southern most part of the shoal.

The Gandhia island, north-east of Panera is also a mangrove island, 1·6 km. north-south and about the same distance east-west. It stands in five fathom depth which forms the coastal extension of sand and reef. It is covered at high water.

Between Dhani and Jamnagar there are quite a few islands and shoals.

Dera is a range of low sand-hills. The name is applied to the coral reef surrounding the Sarmat and Sikka inlets or the whole space between them. The north-west end of Dera sand is a bluff about fifteen feet high and off it are a few scattered stunted mangroves. The reef extends off Dera sand-hill nearly 2 km. to the north-west. The Gus reef is to the south-west of Dera reef.

Nalia, a clump of trees with a sandbank stands about 13 km. west-south-west of Dera. The reef extends off it to the north where the rocks are highest. A mangrove swamp joins Nalia with the mainland. In the centre of the bay between Nalia and Dera is Gus reef.

The Gus reef is more than 5 km. long and 3 km. broad. At a kilometre from its north side there is a long sandbank that dries before the reef shows above water. On its south and west are deep water channels which bear the name of Sikka inlet. The north end of the Gus reef is on a line from Dera bluff to Nalia.

Between Nalia and Kalumbhar there is nowhere so much as 25 fathoms at low water. There are rocky patches at seven and eight fathoms between Mandvi in Kutch and Salaya in Jamnagar.

Kalumbhar is a mangrove island about 6 km. east and west and a little less north and south. About 2 km. northwards the reef dries forming a

projecting point. The Salaya creek lies about 6 km. from the island. The creek is quite deep but narrow. The entrance to Salaya inlet lies between Dhani beyt and Kalumbhar where the waters are ten fathoms deep.

Dhani beyt is a tuft of trees on the sand 10 km. west-south-west of Kalumbhar and forms west point of Salaya inlet.

There are coral banks fronting the shore between Jamnagar and Balachadi. Stretching a longway to the north and west of Bedi creek is a mangrove swamp with a sandbank on its north-east face. To the west of the sand and at a distance 10 km. north-west of Rozi is a mangrove island called the Pirotan island, an excellent landmark. About a kilometre west of Rozi anchorage is a small detached reef dry at low water. About 2 km. north-west of the anchorage lies a rocky two fathom patch. East of Pirotan is a two fathom patch of 8 km. which obstruct navigation. East of Rozi the ground of the Gulf is somewhat rocky for about 2 km. Off Pirotan it is dangerous for vessels to anchor. A coral reef with a steep bank and dry at low water extends off this island 2 km to the north-east and a kilometre to the south-west. South-west of Pirotan lies the entrance to Sarmat inlet between reefs a little more than a kilometre wide. Within the entrance there are some rocky patches. Dera sandy range stands 10 km. south-west of Pirotan.

Beyond Jodiya, the only reef of any note is the Mongra reef. It lies north-west of Jodiya. From it the Hansthal bears north-east by north nearly 16 km. and at low water the mud becomes dry between them. The west end of the reef is deep having five and six fathoms close to it. About a kilometre from this western extreme a heap of sand and shells, which is the first part of the reef to dry, lies nearly on a line with Jodiya. The Mongra reef is about a kilometre at its east end. There is a deep channel along the south and a vessel can be sheltered from strong winds at Jodiya. South of Jodiya for nearly a kilometre is a mangrove.

DRAINAGE—RIVER SYSTEM

The two series of hills, the north-eastern and south-western, as well as the central stretch of tableland which link the two form a distinct water parting from which all rivers and streams of Saurashtra flow in different directions. Jamnagar district is devoid of any large perennial streams. Most of the rivers are small and flow lazily through the low lying lands, into the marsh and sand of the seaboard almost opposite the slopes from which they take their rise. Thus in Jamnagar district, which is in the north-western corner of the peninsula the streams flow toward the Gulf of Kutch in the north and the north-west. None of them has any large tributaries and most of them are dry channels till the advent of the monsoon. The district of Jamnagar is drained from south to north and from the south-east to the north-west to the Gulf of Kutch or the Arabian Sea.

The principal rivers are the Aji, Und, Vartu, Venu, Ghee, Rangmati, Nagmati, Fuljar, Phuljar, Sasoi, Sihan, Ruparel and Demi.

River Aji

It rises in the Rajkot district in the central hills near Lodhida. It enters the district of Jamnagar at Khakhadabela which is about 32 km. by river from Rajkot. The river Niari meets Aji near the district boundary. From thence the river serves as the district boundary for about 2 km. But the latter leaves the Aji to include within Jamnagar the village of Modpar. The river again forms the boundary for nearly 13 km. of its course. It then flows past the villages of Pithad and Morana and loses itself in the sands 10 km. from the coast.

River Und

Rising near the village of Bedia in present Rajkot district at a height of 459 feet, it flows past Khad Dhoraji and Pata Meghpar, on its left and Nana Sagalia, Nana Khijadia and Khokhri on its right. It is joined at Khokhri by the Manvar river. The river Moti Phuljar also joins it at Khokhri. About a kilometre north of Hamapur it receives the waters of river Gal which joins it from the south-east. Flowing for a distance of 16 km. in a north-north-easterly direction it receives again the waters of the Sali. Further north, another river channel, 6 km. in length joins it before it empties into the Gulf at Dobar creek. Its total length is 77 km.

River Ghee

Rising from the central highlands near Devalia it flows through land of about 250 feet in height, west of Khambhalia. Beyond Haripar it again becomes a seasonal river and passes the village of Kabar Visotri, till at Salaya, along with another channel from a lake near Hansthal, 11 km. west-north-west of Khambhalia, it merges with the sands of the coast of the Gulf of Kutch. The total length of the river is 35 km. including 3 km. beyond Salaya in the sandy bed of the Gulf of Kutch.

River Rangmati

River Rangmati also rises in the central highlands near the village of Vad Panchasara where the hills are 491 feet high. Flowing past the villages of Veraval Moti, Bavariya and Changa, it enters a lake (Ranjit Sagar) 10 km. north-east of Chela, from where it takes off again to flow past the city of Jamnagar where it is joined by Nagmati. The waters of the Rangmati are specially favourable for the tie and dye industry for which Jamnagar is still famous.

River Nagmati

Nagmati rises in the Jalia Dewani hills at a height of some 500-700 feet above sea level, near the village of Bavdidad. It flows through rocky land for a distance of 18 km. past the small hill settlement of Nes. The Nagmati along with Rangmati empties into the Ranjit Sagar which is roughly 7 km. in circumference. Naghuna stands on the southern bank of the lake and Naranpar on its left bank. The Nagmati and Rangmati rivers were harnessed to supply water for the district capital. The Nagmati takes off from the Ganga Sagar tank and at the capital about 13 km. north it is joined by Rangmati on the east of the town. It then flows past the old town of Nagnah Bandar, the stronghold of the Jethwas of Jat race whom Jam Raval defeated and founded the town of Nawanagar in 1540. The combined waters of the two rivers flow for about 8 km. before emptying into the Gulf of Kutch, 3 km. east of Rozi Mata. The total length of Rangmati is 34 km., while that of Nagmati is 47 km.

River Fuljar

Rising in the outliers of the central highlands north-east of the village of Devalia Nava it flows past land which is about 250 feet in height and enters the plains. It passes the villages of Babarzar and Rajvad. Five km. north of Rajvad it is joined by another small stream which takes off from the Lakasar hills. Flowing to the east of a hillock 361 feet above sea level it passes the Modpar village where the Dwarka-Jamnagar metre gauge railway line cuts the river. From Modpar it becomes a perennial river and flows north through Lakhia and Jhakar. Its total length is about 35 km.

River Phuljar

This river also rises in the central highlands, where the land is about 371 feet above sea level, about 2 km. south of the village Medi. The total length of the river is 35 km.

River Sasoi

It rises in the central hills about 3 km. west of Laloi village where the hills rise to 639, 651, 694 and 721 feet and several channels pour the water into the Sasoi. It passes through Khabda Nana and leaves Moman, Arikhana and Haripar on its right before it receives the waters of Dhundar which joins it at Lothiya. The total length of the river is 50 km. At Pipli the Jamnagar-Dwarka metre gauge railway crosses the river by a bridge.

River Sihan

Rising in the Lakasar hills, an offshoot of the central highlands, it flows through Kakabhai Sihan and Sukhpur, situated on its right bank and Nana Mandha and Mota Mandha on its left bank. After a course of 27 km. it empties into the Ambla creek.

River Ruparel

Rising in the Khan Khotda hills, an offshoot of the central highlands the river flows for a distance of 37 km. and empties into the Mita Dora creek of the Gulf.

River Demi

Taking its origin near Dhamalpur village at a height of about 500 feet, it flows north and enters the district of Jamnagar north of Gunda village. It empties into the Jhijhora creek of the Gulf.

River Jhijhora

Rising in Morvi territory it flows for about 11 km. outside the district boundary and enters Jamnagar district south of Kerali. After a course of about 24 km. it joins the Sui going past the village of Kerali, Virparda, and Rajpar. The combined waters of the two rivers flow for another 6 km. before it empties into the Gulf at Navlakhi in Rajkot district.

River Venu

The Venu is a tributary of the Bhadar. It rises near Kotha Virdi in the slopes of the central highlands (694 feet) and flows south-east past the village of Melan, situated on its right bank about 19 km. from its source. The river Fuljar rising near Laloi (786 feet) joins the Venu at Kotra from the north-east after a course of 23 km. The entire course of the Venu within the district boundary is about 27 km. The border village of Sidsar is situated on its right bank 2 km. north of the boundary. After a flow of 23 km. from the district boundary the Venu joins the Bhadar north of Kundhech and 2 km. west of Talgana in Rajkot district.

River Vartu

Rising near Virdi where the hills are about 640 feet, it flows west and is joined by several channels which flow from Devalia in the north. North of Monzar it takes a southward bend. The Verari rising east of Rabarika at a height of 540 feet takes a north-westerly bend at Verar to join the Vartu 3 km. north-east of Ramparda. Several channels from the south also

join it at this stage. It then follows the district boundary for 2 km. from Ambaliyara and again for a short distance from Jhalera westwards. It then leaves the district to flow through Junagadh. 1·6 km. north of Sinjira it again enters the district and flows along its boundary past the village of Raval where it sharply turns north-west and after a distance of nearly 4 km. it takes a bend south-west and flows for 5 km. It then enters the sandy coastal track for 6 km. and forms the district boundary once again for 3 km. of its final course before it enters the Meda creek at Miani on the Arabian Seacoast.

River Khari

Rising 3 km. east of Nandana, it flows south-west for 16 km. after which it takes a sharp turn north-west and enters the Okha Ran at Kakar Bet.

GOMTI CREEK

There are no notable rivers in Okhamandal but the Gomti creek on which stands Dwarka is often referred to as a river by the people. It is believed to rise in the village of Bhovda, about 10 km. to the east, known also as Mul Gomti. There is an insignificant stream or *nullah* running from Bhovda and emptying into the creek but it is not a natural extension of the creek. It turns from the sea for ½ km. and then takes a sharp bend southward and loses itself in the salt marshes of Baradia village. There is also another *nullah* which cuts through rocky banks issuing from the ancient Bhimgaja lake, which used to be in the heart of the Okhamandal and extending as far as Rajpura village. During the rainy season this stream becomes a torrent enabling boats to come up the coast for a short distance. There are other water courses which run dry immediately after the rainy season.

In addition to the rivers above mentioned there are other minor streams such as Bhogat, Puna, Minzar, etc., in the district.

CREEKS

There are several creeks on the Jamnagar coast some of which have already been mentioned. On the Arabian Seacoast the most important one is the Meda creek on the Jamnagar-Porbandar boundary. It stretches about 3 km. to the interior with a width of about a km. The land at the head of it is salty and marshy, most of which is in Porbandar (Junagadh) territory. A third of this marsh land, however, extends into Jamnagar. The Sandari and the Vartu flow lazily through this marsh land before emptying into the Meda creek. The Gomti creek is important because on it stands Dwarka, one of the most sacred places of Hindu pilgrimage. On the Gulf coast are the Chhiga creek on Dhani Beyt, the Salaya creek leading to Salaya, the

Ambala creek into which the Sihan river flows, Bharana creek south-east of Kalumbhar island, another creek by the name of Chhija south of Narara Beyt, Jhakar creek into which flows the Fuljar, Patra Vaon creek into which the Sasoi flows, Kadiary and Patra creeks north-east of Patra Vaon, Masura creek, Bedi creek, Mita Dora creek into which flows the Ruparel, the Dabar creek which leads to Jodiya and the Hansthal creek. The Hansthal creek leads to the Ran of Kutch and to the new port of Kandla. Of these only Meda, Bedi, Salaya and Hansthal are of any importance.

Lakes

There are several lakes and tanks in the district. The more important one is the Khara Khetar which is an inlet of the sea on the Arabian coast. It is situated about 26 km. south-east of Dwarka. The Dwarka-Jamnagar railway is to the east of the lake. The Okhamadhi railway station is on the south bank of the lake. North of the village of Hansthal and about ten km. west-north-west of Khambhalia is another lake. The city of Jamnagar is fed by the Ranjit Sagar, built by damming the Nagmati and Rangmati rivers. In the north-east part of the district south-west of Zinzuda village and river is a tank of considerable size with an embankment on its northern side.

Geological Formation

The rock formations met with in the district, arranged in order of increasing antiquity, are as follows

Formations	Age
Alluvium, sand dunes, etc., Miliolite, series	Post-Tertiary
Dwarka beds (Post-Pliocene) Gaj beds (Upper Miocene)	Tertiary
Lateritic rocks (Lower-Eocene) Deccan trap (Cretaceo-Eocene)	Cretaceo-Eocene

Deccan Trap—Deccan trap, the basic lava flow, is the oldest and the most extensively developed rock formation in the district. The rocks are basaltic in composition and spread over wide areas in the form of horizontal sheets and give rise to a relief typical of the Deccan trap topography. They are supposed to be the extension of traps of Kutch, Gujarat and Central India. Although the most prevalent rocks are the basalts and dolerites, a number of other varieties such as felsites, granophyres, rhyolites, obsidian, pitchstone, limburgite-basalt, trachylyte, etc., are also found in parts of the district.

The Deccan lava flows are mostly massive or amygdaloidal. The hard and compact massive flows are generally noticed on the hill-tops. Scoriaceous breccia, agglomerates, tuffs, ash beds, etc., are occasionally noticed. The soft amygdaloidal varieties usually occupy the flanks and also the valley floors. Geodes with zeolites, chalcedony, agate and calcite are often found in the amygdaloidal traps. Both the massive and amygdaloidal traps are greenish grey to dark grey or black in colour. In granularity they vary from compact massive types to fine or coarse-grained rocks. At times, they are porphyritic and exhibit lath shaped phenocrysts of feldspar. The traps are invariably jointed. Besides vertical andinclined joints, sheet joints and columnar or prismatic joints are common. The rock generally consists of augite and labradorite. But occasionally a few large phenocrysts of feldspar, augite or olivine are also observed. Magnetite is a common accessory mineral and generally occurs as dust or granules. Chlorite and serpentine are the secondary minerals. At times some amount of interstitial glass, usually devitrified and altered to a pale green palagonite is also noticed.

The fluviatile and lacustrine deposits formed during the interval of time lapsed between the two successive lava flows are called "intertrappean beds". Although such beds are reported to have been noticed in the adjacent districts, they have not been recognised in this district so far.

Trap Dykes—A number of dykes are associated with the trap flows in the district. Two trends are generally noticed. They are north east-south west and north west-south east. The dykes vary in width from a few inches to about one hundred feet and at times are traced for long distances. They form low knolls, elongated mounds or serrated ridges, sometimes attaining a height of 200 to 300 feet above the level of the country. They are noticed near Ran, Piparia, Khambhalia, Ranpur, Khirsara, Dhanturia, Ambaldi, Bed, Kuvadia, Madi, Pachhtar, Bherdi, and Dhanturia Kandorna. The parallel dykes north of the Alech hills trend east-west and are traced with interruptions for a length of about 8 km. The dyke rocks are mostly compact and rarely pass into vesicular or amygdaloidal types near the surface. They are greyish green to black in colour and usually show a micro-crystalline ophitic texture.

The outpouring of the lavas with their complement of dykes and sills practically ceased towards the dawn of the Eocene epoch. The final outbursts of volcanic activity then became centralised at a few foci of eruption near Mount Girnar in the Junagadh district and in the Barda and Alech hill region which forms the southern boundary of Jamnagar district. In these hills the felsites and other acid intrusive rocks of hypabyssal origin are frequently met with. Felsites are well exposed near Dhebar, Ranpar and Bhavneshwar. The rock is very hard and tough and is prone to weathering forming chips and splinters with conchoidal fracture. It can

be used as a good variety of ornamental stone. A wide dyke of ruddy rhylite, forming a low but conspicuous ridge thickly covered with large, flat, sub-angular fragments of the rock, runs west-north-west and east-south-east between the villages of Hathla and Rozada. This has got differentiated into a narrow band of dark obsidian near Rajda. Granophyres constitute the greater portion of the northern and north-western lands of the Alech hills. The rock is composed essentially of pale red orthoclase felspar and clear transparent quartz, characteristically intergrown in bold micropegmatitic fashion. Magnetite is a common accessory. Rhyolites are also exposed near Hathla, Rozada and Vansjalia.

Lateritic Rocks—The lateritic rocks of the district cover a narrow zone extending practically due north and south from Mota Asota near the Gulf of Kutch to Lamba bordering the Arabian Sea. The rocks are richly coloured, mottled and resemble the "high level laterite". In addition to this lateritic belt, a few outliers of laterite are found above the trap rocks to the south and south-west of Mota Asota, between Ran and Gadhaka and in the vicinity of Bhopalka. They also form several inliers, surrounded by tertiary rocks, in the form of hillocks and knolls south of Bhatia, near Bhogat, between Bhogat and Lamba, and between Lamba and Ghandhvi. The rocks are generally unstratified and consist of soft, variegated clays or concretionary, ferruginous earthy rocks, representing decomposed and lateritised volcanic rocks. The local enrichments of ferruginous material have given rise to limonitic iron ores near Asota, Khambhalia, Bharana, Modpur, Ranpar and in parts of Barda hills. Although the laterites attain a thickness of 200 to 300 feet at places, the average thickness does not exceed 50 feet.

Gaj Beds—The "Gaj beds" of the tertiary period rest conformably upon the traps and overlie the laterities. The largest area covered by Gaj beds in the district is in Kalyanpur taluka. Isolated patches are also noticed at 2·4 km. west of Gurgadh near Mulvel, Khatuba, Aniari and east of Kalyanpur. The formation is represented by limonitic lime-stones, sand-stones, grits, conglomerates and clays which have a typical yellow colour. Gypsum is often found associated with the clays. The total thickness of the Gaj beds has not been estimated. Although many individual sections are about 40 to 50 feet thick, the aggregate thickness of the Gaj beds may be several hundred feet. An abundance of marine fossils characterise the Gaj beds and endow them with a distinctly Miocene facies. The fossils are pelecypods, gastropods, bryozoa and corals. About thirteen species of echinoderms have been identified so far. The Gaj marl beds also contain a number of small foraminifera referable to the families of *Milliodrae*, *Textularidae*, *Lagenidae*, *Globigerinidae*, *Rotalidae* etc. Among coelenterates, *Turbinolidae*, *Astraeidae* and *Lophoseridae* are noticed in the neighbourhood of Nandana and Ran. The fossiliferous localities are near Pindara, Gurgadh and Gaga.

The Dwarka beds are largely developed near Dwarka, in the low lying areas of the Okhamandal taluka and the Beyt island. They consist of variegated lime-stones, earthy, marly or clayey beds, which are partly gypseous with iron-stained bands. A small strip of land around Gurgadh and immediately west of Gaga is also covered by the typical Dwarka beds. They also occupy the higher parts of southern Okhamandal near Dhinaki as thick flaggy beds some of which are made up almost entirely of small organisms. These beds are obliquely laminated or cross-bedded, indicating a shallow littoral area for their deposition. These rocks have been separated from the Gaj beds on account of their conspicuous absence of Gaj fossils.

The geological position of the Dwarka beds is obscure, partly by reason of their paucity in fossil remains and partly on account of the wide difference in the general appearance and mineral constitution as compared to those of the Gaj beds. The lower members of Dwarka beds do not hold any Gaj fossils and indicate their post-Gaj development. Their upper limit is supposed to be Post-Pliocene.

Miliolite Lime-stone—The rocks of the Miliolite series which are Post-tertiary outcrop at a number of places in the district. They are of marine, estuarine, fresh-water and sub-aerial origin and comprise a variety of rocks. The constitutent members of miliolite series are pure lime-stones, earthy concretionary lime-stones, calcareous sandstones, consolidated shell sands, grits and conglomerates. The purer lime-stone bands are white, grey to cream in colour and are homogeneous and fine-grained in texture. The impure varieties have a yellow or pink colour and are comparatively coarse grained in texture. Miliolite lime-stone, locally called "Porbandar stone", is very widely used as ornamental building stone. It is a finely oolitic freestone composed of miniute foraminifera whose tests form the nuclei of the oolitic grains. The sandstones are grey, buff or greyish brown in colour and vary from occasionally massive types to flagstones and even sandy shales. The rocks are practically horizontal and rarely show dips between 10 and 15 degrees. Strong oblique lamination due to current bedding or aeolin action is common. The total thickness of the miliolite formation is not known because nowhere is it fully exposed. The outcrops of miliolite lime-stones occuring in the gorges and on tops of the hills and overlying the Deccan traps, laterite and Gaj beds, indicate that the country was submerged under the sea within recent times.

Miliolite lime-stones resting on Deccan trap are noticed in the hills between Asota and Habardi, near Khambhalia, west of Kota, east of Lamba, near Gandhvi and the tract between Nagka, Ranpur, Dhebar and Bhanvad. They are also found near Jasapur, Babaria, Lalpur, Gala and to the south of Khankotda. Miliolites rest on the laterite zone between Virpar and Lamba; west of Nandana, and along the coast from Bhogat to south of

Lamba. Outcrops resting on Gaj beds are noticed near Gaga, Pindara, Mevasa in the area between Bhogat and Lamba and to the west of the Laterite patch between Bhatia to Maleta.

Subsequent to the deposition of the miliolite groups, there are conclusive evidences to show that greater part of the Saurashtra peninsula was elevated many hundred feet above the level of the sea and suffered extensive denudation. A coastal reconnaissance of the district furnished additional proof of raised beaches, dead coral reefs and inland remains of oyster beds, all indicating the land elevation.

The dead coral reefs occupy the whole of the littoral along the southern shores of the Gulf of Kutch and are also noticed at low water mark along the northern coast of the district; and it is upon this coral ground that the stray pearl-oysters reattach themselves periodically and promote and annual "pearl fishery". The dead coral reefs not only fringe the coastline and island of the district but are also found extending inland up to high-tide level in the neighbourhood of Salaya, Beh, Chudeshwar and Mungani.

Blown sands of sub-recent accumulation form an undulating stretch of dunes along the northern boundary of the district near Pindara, Chudeshwar, Kalumbhar island to north of Jamnagar, and appear to continue in a south-westerly direction towards Balambha, Bhogat and Gandhvi. Sub-recent alluvial lands are not very extensively developed in the district. However, they cover the trappean rocks along the northern bank of the Jhijhora river, and are noticed as far inland as Kerali and from south of Amran to Dhudkot and extend further towards Balambha and beyond. Vast stretches of alluvial lands are also noticed along the Ran coast north of Chudeshwar, along the Ghee river west of Sodasala north of Ambla, along the Meda creek from west of Raval to north of Miani, along the Phophal river west of Bhadra, and along the Chaparware river south of Mevasa.

Recent deposits are found in the immediate vicinity of surface waters and the sites of former lakes and rivers of Post-Pleistocene time. Vestiges of ancient river terraces marked by the presence of the agate and jasperoid conglomerates in the area are noticed near Latipar, Virpar and on the terraced bank of Dhudhala Vokala. The conglomerates are intensely hard, compact and consist of pebbles of translucent to opalescent chalcedony or agates cemented together in a milky white to grey interstitial material. The matrix is composed of an intimate mixture of silica and carbonate of lime, more or less induced with iron, and also by secondary free quartz crystals or hyaline chalcedony. The beautiful rock occasionally exhibits rich tints of yellow, orange, red and white.

The soil of the plains is very shallow, and varies from black cotton soil where the floor is of trap to a light sandy one when resting upon sandstone. Nodules and thin beds of *kankar* are noticed near Verar, Kandorna and Bhanvad. They frequently yield ample supply of excellent material for kilning into good hydraulic lime.

USEFUL MINERALS AND ROCKS

A zone of laterite runs for about 48·28 km. from Panera island in the Gulf of Kutch in the north of Lamba in the Arabian Sea in the south. Bauxite, mostly 'trihydrite', is associated with the laterite and forms the humps and small hillocks generally rising 25 to 30 feet from the ground level. At times, the whole hump consists of only bauxite. The ore occurs as irregular nodules and boulders, set in a loose earthy matrix and in size varying between one inch and several feet in diameter. Nodules are generally confined to the top, while the boulders are noticed at depths. A zone of blue and bluish grey to pinkish clays consisting of pisolitic material, kaolinised basalt and variegated clays occur near the base of the bauxite zone.

Bauxite Deposits—Bauxite deposits are found at numerous places in the Kalyanpur taluka of the district and are estimated to be 10 million tonnes by the State Directorate of Geology and Mining. The places worth mention in this connection are Virpar, Mevasa, Habaradi, Bhatia, Khakharda, Mota Asota, Ran, Nandana, Bhopalka, Kenedi, Lamba and Gandhvi. The ore contains up to 64 per cent Al_2O_3 and a little iron, silica and titania but it has plenty of water, sometimes up to 33 per cent. The total reserves of good quality bauxite are estimated to be about two million tonnes. The deposits of Nandana, Mevasa and Lamba are being worked from time to time since 1952, and the selected material is now sent either for refractory purposes to Dalmiapuram, Alwaye (Kerala), Rajgangpur, Barang and Rourkela (Orissa), Kanpur (U. P.), Delhi, Bombay (Maharashtra), Belagula (Mysore) and other parts of India, besides Thangadh, Ahmedabad, Jamnagar, Morvi and Wankaner in Gujarat or exported to United Kingdom, German Democratic Republic, Japan, Italy and Australia.

Building Materials—The district is well endowed with various kinds of building materials. They comprise clays for the manufacture of bricks, sands for mortar and concrete, lime-stone and *kankar* for lime-making and cement manufacture, numerous kinds of building and ornamental stones, materials for road metal, concrete and railway ballast.

Clays—Clay is found forming an almost continuous fringe along the northern shores of the district. Mud deposits are also found in the neighbourhood of Gandhvi and Bhogat. Much of the mud and the vast quantities of riverside clays are annually consumed for the making of sun-

dried bricks, kilned bricks, rough roofing tiles and unglazed earthenware vessels throughout the district.

Lime-stones—The miliolite lime-stones, described as "Porbandar stone" vary in colour from white, buff, yellow, grey to brown and are chiefly used as building stone. The rock is soft when quarried but becomes quite hard on exposure. It is quarried along the western base of the Barda hills in the vicinity of Ranpar, Rajpura, Pipalia, Mota Asota, Bhatia, Lalpur, Mevasa, Pasaya, etc.

Deccan Traps—Deccan traps cover the major portion of the district and are quarried at a number of localities for building purposes and for use as road metal.

Ornamental Stones—Ornamental variety of building stones are at times quarried in the district. They are felsites, granophyres, etc., in the Alech hills, calcite suitable for the manufacture of small ornamental wares near Kajurda, Retala Kalavad and near Bhanvad; laterite-conglomerate near Habardi and fossiliferous Gaj lime-stones near Pindara.

Lime and Cement—Miliolite lime-stone in the coastal areas around Okhamandal is extensively used in the cement factory at Dwarka. It contains about 51 per cent CaO, 1·5 per cent MgO and 2.5 per cent silica. Coral lime-stone occurring along the coastal margin is being used by Tata's Mithapur Works for chemicals. The deposits near Mithapur alone are reported to contain 5,080,000 tonnes. It contains about 97 per cent $CaCo_3$ with 2·2 per cent SiO_2.

Road Metal—Fresh, fine-grained and compact dolerites and Deccan traps are by far the most suitable and widely used rocks as road metal. As the major portion of the district is covered by the Deccan lava flows, there is no dearth of such material, which is quarried throughout the district.

Laterite— It is being worked for road surfacing around Bhatia, Lamba and Bhogat in the Kalyanpur taluka. Hard and compact brecciated lateritic conglomerates from the base of the miliolite beds are capable of resisting severe attrition and are suitable for road dressing. The rock could be worked near Kandorna, Jasapur, Bhoria, Ishwaria, Nikava, Lalpur and Arikhana.

Calcite—Calcite occurs in the form of veins associated with the Deccan traps in a number of localities in the district. They trend between north east-south west and north west-south east, vary in width from one foot to five feet and generally run for long distances varying from a furlong to a couple of miles or more and could be worked to a depth of 30-35 feet. The veins at times, appear to branch and then coalesce. They generally conceal under a cover of black soil or miliolite lime-stone, varying in thickness from

one to five feet. The mineral is generally white, but occasionally red, pink, grey and yellow varieties are also noticed.

Calcite has been worked out from time to time near Mahadevia in Khambhalia taluka and in Rafudad, Govana, Jasapar, Jogwad, Rasangpar, Pipli, Rangpur, Modpar and Dharampur in Lalpur taluka. Moti Matli, Nani Matli, Vavdi, Sarvania in the Kalavad taluka; near Sidsar, Khirsara and Asota in the Kalyanpur taluka; and near Pithadia and Ranjitpar in the Jodiya taluka. Minor veins are also reported to occur about 1·6 km. south-south-east of Ranjitpar, ½ km. south-west of Khirsara, 4 km. north-west of Lalpur, ½ km. south of Sarvania, etc. The calcite is sorted in three qualities, viz., superfix (best white), calco (white) and gemco (grey-white). They are generally ground to fine powder and sold in the markets at Bombay, Calcutta and elsewhere in the name of 'Whiting'. It is used as a filler in the rubber, textiles, and paper industries and also in the glass and tannery industries.

Copper Ore—Minor occurrences of copper ore have been recorded in the Deccan traps in a well section south of Beh, 21 km. north-west of Khambhalia. The occurrences are insignificant.

Fuller's Earth—Fuller's earth is a variety of non-plastic clay which has the power to filter and decolour oils, fats, and greases. It is thus chiefly used in refining petroleum, vegetable oils, etc. Deposits of Fuller's earth occur associated with ochres in the lateritic zones around Nandana, Ran, Mevasa, Habardi and Virpar in the Kalyanpur taluka.

Gemstones—Occurrences of the semi-precious stones are found as geode materials containing chalcedony, moss agate, amethyst, onyx, etc., near Beraja, Navagam, Latipar, Jivapur, Timbdi, Vijarkhi, Bodi, Chapra, Jalansar and Bhangol. Chalcedony, agate, and jasperoid conglomerates of varying sizes are found near Veratia, east of Virpar, Nani Nagajar and on the terraced banks of the Dhudhala Vokala.

Gypsum—The gypsum deposits of the district are supposed to be the best in Saurashtra. The mineral occurs in the form of selenite veins or segregations in the plastic clay and marl of the Gaj formation near Virpar, Bhatia, Nandana and Gurgadh in the Kalyanpur taluka of the district. The quality of gypsum is very good and some of the deposits are being worked for use in cement and "Plaster of Paris" industry. It can also be used in the fertiliser industry. The reserves according to the Geological Survey of India are of the order of 4,775,000 tonnes of which 3,759,000 tonnes may be in the Ran area alone.

Ilmenite—Ilmenite is a titanium bearing iron ore containing up to 32 per cent titanium. It is occasionally noticed in the sea sands near

Gandhvi, Pindara and at Bari Vokala near Modpar, but the deposits are not large.

Iron Ore—Evidence of abandoned iron ore smelting are noticed near Mota Asota, Khambhalia, Modpar, Rampar and elsewhere. Hematitic and limonitic iron ores occur associated with laterities at a number of places in the Kalyanpur taluka, particularly at Nandana, Ran, Mevasa, Habardi, Virpur, Mota Asota, Lamba, etc. The ores contains 44 to 67 per cent iron. The deposits, however, are widely scattered and comprise essentially low grade ores.

Mineral Pigments—Ochres are used for the manufacture of paints and for colouring ceramic goods, cement, linoleum, rubber, wood, etc. A variety of tints including sienna and umber are found associated with the lateritic rocks, particularly near Ran, Nandana, Mevasa, Habardi, Virpar, Bankodi, Mahadevia and Lamba in the Kalyanpur taluka. Some of these deposits are worked out on a small scale for local consumption but there is considerable scope for further development of the industry, if they are systematically worked out and properly levigated. A two feet thick red bole bed, underlying a five feet bed of trap, is seen in the raised ground betwsen 7th and 8th milestones on the Jamnagar-Bedi-Sikka Road, which may yield substantial reserves of ochre.

The imoortant minerals worked in the district were bauxite, calcite, calcareous sand, sea sand, etc. The minor minerals worked in the district were road metal, murrum, lime-stone, building stone and sand. In 1964 the production of bauxite was 89,943 tonnes, that of calcite 1,920 tonnes, calcareous sand 319,068 tonnes and sea sand 466,435 tonnes. Other minerals, such as murrum and road metal accounted for 46,799 and 41,455 tonnes respectively.

Of the minerals above mentioned the total value of which was Rs. 7,196,684; sea sand accounted for Rs. 2,411,000; calcareous sand Rs. 1,650,000; lime-stone Rs. 1,110,000; bauxite Rs. 932,000 and other building stones Rs. 578,818.

Salt—Salt is produced by direct solar evaporation of sea-water in the district. There are three main centres, viz., near Jamnagar in the Jamnagar taluka, near Salaya in the Khambhalia taluka and near Mithapur in the Okhamandal taluka. The total production was of the order of 754,579 tonnes in the year 1964.

Ground Water—Ground water resources of any place depend on the total rainfall, the run-off, percolation, and other geological considerations regarding rock formations and their structure, etc. Ground water potentialities of principal geological formations in the district are mentioned below.

Alluvium and Miliolite—With the exception of the low lying tidal flats or saline tracts along the coast, generally abundant water is available for domestic needs and for some irrigation in alluvium and miliolite formation within a shallow depth from the surface. Sub-surface water from the Ran region is entirely brackish, the desiccation of the Ran being responsible for the general salinity of the tract.

Gaj and Dwarka Beds—The aquifers in the Gaj formations are grits, coarse sandstones, lime-stones, conglomerates, etc. The wells in Gaj beds generally yield a good supply of water within 20 to 35 feet from the surface. Enough potable water is sometimes met with along the junction of the Gaj rocks overlying traps the reason being that the Gaj beds being pervious, water freely percolates till it strikes the underlying traps which form an impermeable base. The Dwarka beds comprising shelly lime-stones and sandstones yield some quantity of water.

Deccan Trap—The major part of the district is covered by the Deccan lava flows which are poor containers of water. In places small quantities of water suitable for domestic use are found stored in thick soil cover, decomposed rock, flow lines, joints and fissures. Large concentrations of water may also be expected along the margins of basic dykes which act as barriers to the movement of ground water. The 'ash-beds', intertrappean, "red bole beds" breccias and vesicular lavas augment the yield of water. Wells dug on river banks or at the junction of streams are usually more productive. Laterite caps also hold abundant supply of water under certain conditions.

Flora

Forests—The forest areas in the district admeasure about 647·49 sq. km. The district forms part of the Rajkot Forest Division, which comprises the forest areas of Jamnagar, Surendranagar and parts of Rajkot district. The forest areas are classified into three different types, viz., (i) Mangrove forests (ii) Open scrub forests and (iii) Grasslands.

(*i*) *Mangrove Forests*—This type of forests in distributed all along the coast of Jamnagar district and occupies an area of 155·40 sq. km. They are situated in the creeks and lagoons and on low islands, where the force of wind and sea is not so strong. They occupy a belt of low lying muddy ground which is subjected to inundation by tidal waters everyday.

Amongst the species mentioned below, the cher predominates. The mangroves (cher species) gradually spread seawards by means of roots which hold up silt and form new land. As silt accumulates the ground becomes elevated and when it gets dried it is rendered unsuitable for mangroves. A new vegetation formation grows there. In such cases the tree species

commonly replacing mangroves are *salvadora persica, acacia senegal*, etc. The following species of trees are noticed in this category of forest :

(1) *Avicennia Officinalis* (*Cher*), (2) *Rhizophora Mucronata* (*Karod*), (3) *Coriops Candollcena* (*Kunri*), (4) *Salvadora Persica* (*Pilu*), (5) *Acacia Senegal* (*Gorad*), (6) *Acacia arabica* (*Desi Baval*), (7) *Boswellia serrata* (*Saladi*), (8) *Salvadora Oleoides* (*Jar*).

(*ii*) *Open Scrub Forests*—The forest areas under this type falls under the category of "Dry Deciduous Thorny Scrub Forests". The forest areas under this type is approximately 233·10 sq. km. in extent and is situated in Alech, Dalasa, Barda and Okhamandal regions of the district. In certain parts where human factor has interferred less, the tree growth survives well, otherwise the remaining parts falling under this type are more or less treeless and barren. The trees are scattered, and stunted in growth. The unsatisfactory growth of forests of this type is due to maltreatment, indiscriminate grazing and cutting and unscientific management in the past, causing innumerable blanks and semi-blanks. The species of tree growing in these areas are :

(1) *Acacia arabica* (*Baval*), (2) *Acacia Senegal* (*Gorad*), (3) *Capparis Decidua* (*Karda*), (4) *Diospyros Melanoxylon* (*Timru*), (5) *Butea frondosa* (*Khakhra*), (6) *Azadirachta indica* (*Nim*), (7) *Morinda tinctoria* (*Aal*).

Scrubs—(1) *Holarrhena antidysenterica* (*Kado*), (2) *Cassia auriculata* (*Aval*), (3) *Tecoma undulata* (*Ragatroydo*).

(*iii*) *Grasslands*—The Forest Department in the district maintains grasslands, which are termed as *vidis*. These *vidis* are further classified into reserved and non-reserved *vidis*. The reserved *vidis* accounted for 8,883 acres and non-reserved 5,934 acres in the year 1965-66.

Forests in the district are poor and there are many blanks in the forest areas. Several schemes[1] have been implemented by Government to improve grasslands, under the Second and Third Five Year Plans and accordingly 3,325 acres of land have been afforested. The following are the types of grasses growing in *vidis*.

(1) *Eremopogon foveolatus* (*Saniar*), (2) *Andropogon ischaemum* (*Zinzvo*), (3) *Andropogon intermedius* (*Dharfada*), (4) *Anthistiria imberbis* (*Ratadu*), (5) *Apluda aristata* (*Bhangoru*), (6) *Cymbopogon schoenathus* (*Rosha*).

1. For details of these schemes, see Chapter IV—Agriculture and Irrigation.

Fruit Trees

Meagre rainfall in the district is not conducive to abundant growth of orchards and plantations in the district. Yet in certain areas and tracts where conditions permit, fruit cultivation has been undertaken. The total area covered under 'fruits' approximates 1,000 acres. The fruits commonly grown are mango, coconut, *chikoo*, *papaiya* and banana.

Mango—Mango trees are found in the taluka of Kalavad, Khambhalia, Jamnagar, Dhrol and Jodiya. Two known varieties of this fruit are *kesar* and *deshi*.

Coconut—Coconut trees are generally grown near the sea-shore of Jamnagar, Khambhalia, Kalyanpur and Okhamandal talukas of the district. The coconut plantation in Varvala village of Okhamandal taluka is famous.

Chikoo—*Chikoos* are grown in Khambhalia and Jamnagar talukas of the district, where only the *deshi* variety is grown.

Papaiya—This fruit is grown all over the district in two varieties viz., *deshi* and *madhubindu*.

Banana—Bananas are grown in Jodiya, Jamnagar, Khambhalia and Kalavad talukas of the district.

Fauna

Wild Animals

The Jamnagar district like all other districts of Saurashtra has seen a rapid decline in the number of wild animals. This state of affairs is due to indiscriminate killing by shooting and snaring of animals and the destruction of natural vegetation by overgrazing. A short account of the better known animals is given below.

Lion—*Panthera leo* (Linnaeus) (*Sinh*)—According to *Statistical Account of Nawanagar State*, "The lion used formerly to frequent the entire Nawanagar State and until A. D. 1860 they abounded in the Barda and Alech hills. Since, however, cannon were fired in the pursuit of the rebel Vaghers in A. D. 1860, lions left the Bardas and Alech never to return, and are now only to be found in the Gir Forest and rarely in the Girnar mountain under Junagadh."[1] However, at present there are no lions in the district.

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1. Watson, J. W., *Statistical Account of Nawanagar State*, 1879, p. 8

Panther—Panthera pardus (Linnaeus) (*Dipdo*) is known as *Kuti Dipdo* and *Sinh-Dipdo* according to size. This animal is far commoner than imagined. The Alech and Barda hills on the Junagadh border are the places of abode.

Hyaena—Hyaena hyaena (Linnaeus) (*Jarakh*) is common animal in the district. It has a powerful sense of smell and can trace carcasse from a pretty long distance.

Wolf—Canis lupus (Linnaeus (*Nar*) is smaller than hyaena. It lives on the outskirts of forests and visits villages in the neighbourhood after dusk.

Jackal—Canis aureus (Linnaeus) (*Shial*) is smaller than wolf in height but is believed to be more cunning. It is found all over the district.

Fox—Vulpes bengalensis (Shaw) (*Lonkadi*) is smaller than a jackal in height and usually lives in holes and burrows. It is seen after dusk near the villages.

Wild Cat—Felis chaus Guldenstaedt (*Jangli Bilado*) is found commonly in the forests.

Wild Pig—Sus scrofa (Linnaeus) (*Bhund* or *Dukkar*) is a very strong and sturdy animal. The specie with long protruding teeth is known as *ekal*.

Mongoose—Herpestes auropunctatus (Hodgson) (*Nolio*) is common throughout the district.

Porcupine—Hystrix Indica (Kerr) (*Shedhadi*) is found in forests and in grassy areas. This harmless and interesting animal has a sweet tooth for fruits and is frequently killed while pilfering in orchards.

Sambhar—Cervus unicolor (Kerr) (*Sambhar*). Due to excessive shooting of this animal in the past it is practically extinct and found rarely near hills.

Spotted Deer—Axis axis Erxleben (*Chittal*).is found in Barda hills and Rozi. It was introduced at Rozi which became the shooting preserve of the former ruler.

Blue Bull—Boselaphus tragocamelus (Pallas) (*Nilgai*). Due to indiscriminate shooting in the past it is confined to the forest areas in the hills.

Black Buck—Antelope cervicapra (Linnaeus) (*Kaliar*). Large herds of black bucks are no longer evident, though a few isolated pairs or small herds of half a dozen animals might still be found along the northern coast in the extensive salt pans and mangrove clumps.

Indian Gazelle—Gazella gazella (Pallas) (*Chhinkaroo*). A few isolated pairs of Indian Gazelles are found along the dunes on the Arabian Seacoast and possibly in broken country of the Alech hills.

Large herbivoroeus mammal of Indian Seas-Dugong Dugong (Muller) (*Dariyai Gay*)—This interesting mammal is frequently reported off the Jamnagar coast. The animal is amiable and grotesque.

Birds

The district has a rich and varied avifauna. Especially in winter, bird life is rich when the local residential forms are augmented by many species coming down from the north to pass the winter in the country side and along its extensive coastline. Demoiselle cranes visit this district in winter. They are accompanied by closely resembling common cranes which also fly in flocks. On fresh water lakes, the duck population is an interesting feature during winter when a variety of species arrive in September to leave in February and March. The shore birds are also a spectacular sight amassed on salt pans during winter months. Among these the most amazing are the immense flocks of both lesser and large flamingos (*Phoenkonaies minor*) (Geoffrey). These birds have a very peculiar life cycle and their breeding requirements are fastidiously linked with brine concentration. The important birds of the district are described below.

Sea Birds

Eastern Curlew—Numenius arquata lineatus Cuvier (*Khalili*) is a bird with a curbed bill and *khaki* brown colour. Its legs are fairly long and grey. It is found mostly on the seacoast especially in winter. It can also be seen near lakes and grassy lands. It is a migratory bird coming from the north.

Eastern Common Crane—Grus grus liffordi Shape (*Kunj*) has black feet and two dark strips on the head and neck. It is mostly seen in winter along the seacoast and prefers open country. While migrating the birds move in ' V ' shape formation and fly high in the sky. They feed on insects, grains, etc.

Jerdon's Little Ringed Plover—Charadrius dubius jerdoni (Legge) (*Titodi*) has a good conspicuous white colour and is fairly common on the seacoast and on lake and river sides.

The Pamirs Lesser Sand-Plover-Charadrius mongolus atrifrons Wagler (*Nani Retal Titodi*) is about the size of a quail with upper half brown to grey brown and lower half white. It flies low and swiftly and is very common along the sea-shore in monsoon.

Grey Plover—Squatarola squatarola squatarola (Linnaeus) (*Batana Titodi*) has *khaki* grey colour and blackish legs. It is a migratory bird.

Gull-billed Term—Gelochelidon nilotica nilotica (*Gmelin*)—(*Dhomda Dhomdi*) is very common on the seacoast and is also found inland. The birds are active in diving down to and circling over places where food is abundant. They have migratory habit.

Brown-headed Gull—Larus brunni cephalus Jerdon (*Dhomdi*) is usually found in harbour creeks either single or in group.

White-breasted Kingfisher—Halcyon smyrnensis smyrnensis (Linn.) (*Kalkaliyo*) has black wings, blue green tail and neck of chocolate colour. It is quite common along the coast.

Grey Heron—Ardea cineres (Linn.) (*Kabut*) is ash grey in colour and its neck and breast are greyish white. It is quite common along sea-shore and lake side. Its main food is fish, frogs, etc. It flies long distance in search of food and alights even at the smallest water pools and streams where it thinks food may be available.

Black-necked Stork—Xenorhynchus asiaticus asiaticus (Latham)—(*Kalo iagula*) is usually recognised by its black bill and glossy black head and neck. It is found in pairs near marshy sea-shores and rivers.

Ruddy Sheldrake or Brahminy Duck—Casarca ferruginea (Vroeg) (*Batak*) is a large duck with uniform ferruginous colour and it has white patch on fore wings, with a round ring on its neck. It is usually seen in winter along the seacoast, mouths of rivers and salty marshes. In addition to these coastal birds, tortoises are also met with along the coast.

INLAND BIRDS

So far as inland area is concerned the following birds are quite common :

Peacock—Pavo cristatus (Linn.) (*Mor and Dhel*) (Male and female respectively)—This beautiful creature which is personification of pride, is the national bird of India. The female is drab compared to male who stands resplendent in brilliant blue, with touches of irridiscent green and gold, his wings tipped with russet and his tiny tiara adding final touches to his air of royalty. This bird is associated with Saraswati, Goddess of learning, whose carrier it is. Because of sentimental value attached to it, it has received natural protection from the people. Peacock is very common throughout Saurashtra.

King Vulture—Sarcogyps calyus (Scopoli) (*Raj Gidh*)—Its neck and legs have no feathers. It usually feeds on dead animals.

White-backed Vulture—Pseudogyps bengalensis (Gmelin) (*Gidh*)—*Gidh* feeds on birds and dead animals.

Barahminy Kite—Hiliastur indus indus (Boddaert) (*Brahminy cheel*) is a scavanger which feeds on waste food usually found in towns and villages.

Common Pariah Kite—Milvus migrans Govinda Sykes (*Samadi*) is smaller than a vulture. It is brown in colour. It is a daring bird and sometimes snatches food from man's hand.

Bonelli's Eagle—Hieraetus fasciatus fasciatus Vieillot (*Sunsagar*)—This bird is slightly bigger than a kite. It is a very active and fearless bird, which can be trained to capture wild birds. It feeds on dead animals, lizards, etc.

Shikara—Astur badius dussumieri (Temm.)—(*Shakra*) is very common in Saurashtra. It is ash grey in colour with long slender legs. It catches prey taking it by surprise.

Black Partridge—Francolinus francolinus (Linn.) (*Talia Tetar*) is mostly found in grassy lands and scrub forest. Its head and neck are streaked with dark-brown blackish line.

Common Grey Partridge—Francolinus pondicerianus interpositus Hartert (*Khadayar Tetar*) is a bird common in grassy areas and forests.

In addition to these, the birds, which are common and seen throughout the district are cuckoo, crow, cattle egret, Indian rose-ringed parakeet, common Indian sandgrouse, and Indian brown-backed robin.

REPTILIA

The reptiles are represented by crocodiles, lizards, tortoises and snakes. The crocodiles were formerly plentiful in all reservoirs and permanent pools in river beds. Their number of late, however, has declined alarmingly. Possibly a few rather small specimens not exceeding six feet may still lurk in odd river pools.

Lizards—Among other reptiles, several species of lizards are common throughout the district, the largest being the Indian Monitor Lizard (Monitor Linnaeus) which grows to a length of 3 feet. The others are common Blood sucker (*calotes versicolor*), the colourful Skink (*Mabula sp.*) and the Common House Gecko (*Hemidactylus sp.*)

Tortoise—Fresh water turtles (*Lissemys sp.*) are seen sunning themselves in the large river pools. Tortoises (*Testudo elegans*) are also found in grass reserves.

SNAKES

This region, particularly in the north, abounds in scrubby forests and a sandy coastal area. Stony plains are frequent in the south-eastern part. The forests dry up in summer but during the rains patches of green and even bamboos which have been recently planted are quite frequent. Different kinds of snakes found in the district may be classified as under into two broad categories viz., (i) non-poisonous and (ii) poisonous.

NON-POISONOUS

FAMILY : BOIDAE

Python molurus (*Ajgar*)—This snake is met with round about lake Ranasar. It grows to about 15 feet and is brown with pinkish patches all over. It is known to frequent local hills with rocks, green vegetation and some water reservoirs. It kills by constriction.

Eryx conicus—It is mistaken to be two-headed because of its thick tail. it lives in sandy or reddish soil. It is sluggish, grows to about three feet and is brown in colour with deep brown irregular patches.

FAMILY · COLUBRIDAE

Ptyas mucosus—This rat snake is found all over the State and grows to a length of 10 feet. It is slightly yellow in colour with patches of deep brown and black towards the tail end. It is considered to be a good snake as it controls rats. It lashes and also ties a knot with its tail to pull or hold.

Natrix piscator—It is a checkered black snake, found all over the district near dirty ponds and rivers. It grows to about four feet with ash colour body on which are present checkered black squares and stripes. The belly is white and often times the dorsal ash colour is seen to be olive. It feeds on frogs near water. It bites quite fiercely.

POISONOUS

FAMILY : ELAPIDAE

Naja naja—This snake is very common all over the district. It is found in fields and in forests alike. People fear this snake and worship it. On the hood of this snake one may have binococellate mark or no mark at all.

The poison of this snake is neurotoxic. It is the common cobra which grows to about six feet.

Bungarus Coeruleus—Steel blue in colour this snake has white cross bars. It is occasionally met with in the dry regions. Its poison is neurotoxic.

FAMILY : VIPERIDAE

Vipera russelli—This is quite a common variety which is locally known as *Kodio*. It is a lethargic snake growing to about four feet. It has a greenish brown body having deep brown or empty spots in three rows on the dorsal side. It bites very badly and the poison causes a burning pain and coagulation of the blood. This is common Russell's Viper.

Echis carinatus—This specie was reported round about the stony regions. It is common saw-scaled viper. Local people called it *nagin*. It often sits forming the figure of ' 8 ' and makes a sound by rubbing scales. It grows to about twelve inches in length and often strikes, while one is moving near stones. It is very much feared by the people.

FISH

Jamnagar district has a long coast line. The important fishing ports on this coast are Judiya, Sachana, Bedi, Sarmat, Sikka, Vadinar, Bharana, Salaya and Okha. All these fishing centres are located in the Gulf of Kutch where maximum depth is 29 fathoms. But the fishermen usually fish within 10 fathoms line. The Gulf is a spawning ground for a number of species.

The following varieties of fishes are available in the district at Jamnagar and nearby ports.

Sl. No. 1		Scientific name 2	English name 3	Local name 4
1	Order	: *Acanthopterygii*	Jew fish	*Ghol*
	Family	: *Sciamenidae*		
	Genus	: *Sciansa*		
	Species	: *Sciennena Sina*		
2	Order	: *Acanthopterygii*	Indian Tassel fish	*Dara*
	Family	*Polynemidae*		
	Genus	: *Polynemus*		
	Species	: *Polynemus indicus*		
3	Order	: *Acanthopterygii*	Jew fish	*Koth*
	Family	: *Sciaenidae*		
	Genus	: *Sciaenidae*		
	Species	: *Sciaenoides*		
4	Order	: *Acanthopterygii*	Grey Pomfret	*Pithhu*
	Family	: *Stromalsidul*		
	Genus	: *Stromateus*		
	Species	: *Stromateus cinerus*		

Sl. No.		Scientific name	English name	Local name
1		2	3	4
5	Order	: *Physostomi*	Chinese-herring	*Palla*
	Family	: *Clupidae*		
	Genus	: *Clupea*		
	Species	: *Clupea to*		
6	Order	: *Acanthopterygii*	Silver Pomfret	*Vichuda* or *Pithhu*
	Family	: *Stromateidae*		
	Genus	: *Stromateus*		
	Species	: *Stromateus Sinensis*		
7	Order	: *Plagiostomata*	Shark	*Magara*
	Family	: *Carcharidae*		
	Genus	: *Carcharias*		
	Species	: *Carcharias dussumieri*		
8	Order	: *Plagiostomata*	Hammer headed Shark	*Kannar*
	Family	: *Carcharidae*		
	Genus	: *Zygaena*		
	Species	: *Zygaena blochii*		
9	Order	: *Chondropterygii*	Skate	*Buthar* or *Chetar*
	Family	: *Rhinobatidae*		
	Genus	: *Rhinobatus*		
	Species	: *Rhinobatus granulatus*		
10	Order	: *Acanthopterygii*	Grey Mullet	*Bodaki*
	Family	: *Mugilidae*		
	Genus	: *Mugil*		
	Species	: *Mugil*		
11	Order	: *Acanthopterygii*	Mullet	*Gandhio*
	Family	: *Mugilidae*		
	Genus	: *Mugil*		
	Species	: *Mugil dussumieri*		
12	Order	: *Acanthopterygii*	Green-back Mullet	*Boyee*
	Family	: *Mugilidae*		
	Genus	: *Mugil*		
	Species	: *Mugil tade*		
13	Order	: *Acanthopterygii*	Lady fish	*Kunga*
	Family	: *Trachinidae*		
	Genus	: *Silago*		
	Species	: *Silago sihama*		
14	Order	: *Physostomi*	Cat fish	*Khaga*
	Family	: *Siluridae*		
	Genus	: *Arius*		
	Species	: *Arius Caelatus*		
15	Order	: *Decapoda*	Prawns	*Jinga* or *Soniya*
	Suborder	: *Macrura*		
	Genus	: 1 *Penaeus* 2 *Metapenueus*		
16	Order	: *Monotocardia*	Sacred Chank	*Shank*
	Family	: *Turbinellidae*		
	Genus	: *Xancus*		
	Species	: *Xancus Pyrum*		
17	Order	: *Pseudolamellibranchiata*	Pearl-Oyster	*Moti-ni-Chhip*
	Family	: *Ostracidae*		
	Genus	: *Pteria*		
	Species	: *Pteria vulgaris*		
18	Order	: *Fylibranchia*	Window-Pane Oyster	*Kansara moti-ni-Chhip*
	Family	: *Anomidae*		
	Genus	: *Placenta*		
	Species	: *Placenta placenta*		

NOTE :

The places where the important species of fish are available are noted in the Chapter IV—Agriculture and Irrigation.

CLIMATE

The climate of this district is generally pleasant. The year may be divided into four seasons—cold season from December to February; hot season from March to May; the south-west monsoon season from June to September and the post-monsoon season during October and November.

Rainfall—Records of rainfall in the district are available for only two stations, Jamnagar and Dwarka, for the last 60 years. Details of rainfall at these two stations and their average which may be taken as representing the rainfall of the district as a whole are given in Statements I·3 and I·4. The average annual rainfall in the district is 412·2 mm[1] (16·23"). About 95 per cent of it is received during the south-west monsoon season, July being the month with the highest rainfall. The rainfall generally goes on decreasing from the south-east to the north-west region. It varies largely from year to year owing to the irregular and erratic nature of the monsoon. During the sixty year period 1901 to 1960, the highest annual rainfall was in 1944 when it amounted to 213 per cent of the normal. In 1918, the year with the lowest rainfall, only 14 per cent of the normal was received. Between 1901-60, there were as many as 21 years when the annual rainfall was less than 80 per cent of the normal. Of these 21 years, there were two occasions, one of four and the other of five years, when the rainfall was less than 80 per cent of the normal for two consecutive years. These periods occurred between 1922-1925 and 1938-1942 respectively. Statement I·4 shows that in 38 years out of 60, the annual rainfall was between 200 and 700 mm. (7·87" and 27·56").

On an average there are 18 rainy days (i. e., days with rainfall of 2·5 mm-10 cents-or more) in a year, Dwarka having only 16 days and Jamnagar 21.

The heaviest rainfall in 24 hours recorded at any station in the district was 355·1 mm. (13·98") at Dwarka on November 18, 1951.

Temperature—There are two meteorological observatories in the district, one at Jamnagar and the other at Dwarka. The climatological data of Dwarka is representative of conditions in the western coastal strip of the district which generally has a more equable climate compared to other parts. The data for Jamnagar may be taken as typical of the conditions in the rest of the district. From about the middle of November, temperature begins to drop fairly rapidly. January is usually the coldest period of the year with the mean daily maximum temperature at 26·0° C (78·8° F) and the mean minimum at 11·6° C (52·8° F). In association with cold waves which affect the district in the wake of western disturbances passing across North India in the cold season, minimum temperature may drop down to within 2° C of

1 Based on all available data up to 1960.

the freezing point in the areas excluding the western coastal strip, where the minimum temperature is 4° to 5° C higher than in the interior.

Temperature rises steadily from about the beginning of March till May which is usually the hottest month with the mean daily maximum temperature at 36·3° C (97·4° F) and the mean daily minimum at 25·1° C (77·1° F). In the western coastal region these temperatures are generally lower. Night temperatures in June are a little higher than in May. With the onset of monsoon by about the middle of June, temperatures decrease and the entire monsoon season becomes pleasant. After the withdrawal of monsoon by about the middle of September, temperature rises a little and a secondary maximum is reached in October. Both day and night temperatures begin to drop by November. The maximum temperature recorded at Jamnagar was 44·4° C (112·0° F) on May 21, 1903 and the minimum was 17° C (35·0° F) on January 16, 1935. At Dwarka the highest recorded maximum temperature was 42·7° C (108·9° F) on May 21, 1959, and the lowest minimum was 6·1° (43·0° F) on January 31, 1929.

Humidity—The air is humid throughout the year. Relative humidities are on the average about 80 per cent during the south-west monsoon and about 60 to 75 per cent in the rest of the year.

Cloudiness—During the south-west monsoon, skies are moderately to heavily clouded. Clear or lightly clouded skies are common in the rest of the year.

Winds—Winds are strong and blow from the south-west or west during the monsoon period. In October they are moderate and blow mainly from directions between south-west and north-east. North-easterly winds also begin to appear in this month but in the next three months easterly or north-easterly winds of moderate force prevail. In the hot season winds strengthen and blow mainly from the south-west or west.

Special Weather Phenomena—In association with cyclonic storms or depressions in the Arabian Sea in the post-monsoon months and to a lesser extent in May and June, the district experiences strong winds and widespread rain. Thunderstorms occur in May and June. In the cold season occasional fog occurs.

Statements I·5, I·7 and I·9 give temperature and humidity, mean wind speed and frequency of special weather phenomena for Jamnagar. Statements I·6, I·8 and I·10 give similar data for Dwarka.

STATEMENT

Normals and extremes

Station	Number of years of data		January	February	March	April	May	June	July	August	September
1	2		3	4	5	6	7	8	9	10	11
Jamnagar ..	60	(a)	1.3	1.8	1.5	0.5	6.1	61.2	225.8	100.1	56.6
		(b)	0.1	0.2	0.1	0.0	0.3	2.8	8.1	5.4	2.7
Dwarka ..	60	(a)	2.5	5.1	2.3	0.5	0.8	44.2	186.0	68.3	38.6
		(b)	0.3	0.4	0.2	0.0	0.0	2.1	6.3	4.0	2.0
Jamnagar (District)		(a)	1.9	3.5	1.9	0.5	3.5	52.7	206.3	84.2	47·6
		(b)	0.2	0.3	0.1	0.0	0.1	2.5	7.2	4.7	2.3

Source :

The Deputy Director General of Observatories (Climatology and Geophysics), Poona

NOTE :

(a) Normal rainfall in mm., (b) Average number of rainy days (days with rain of 2.5 mm. or more)

* Based on all available data up to 1960.

** Years given in brackets.

I-3

of rainfall

October	November	December	Annual	Highest annual rainfall as percentage of normal year**	Lowest annual rainfall as percentage of normal year**	Heaviest rainfall in 24 hours*	
						Amount (mm)	Date
12	13	14	15	16	17	18	19
7.4	2.3	1.5	466.1	205 (1917)	17 (1911)	337.8	1920 January 13
0.5	0.2	0.1	20.5				
5.9	2.0	1.8	358.3	302 (1944)	7 (1918)	355.1	1951 November 1
0.3	0.1	0.2	15.9				
6.3	2.1	1.7	412.2	213 (1944)	14 (1918)		
0.4	0.1	0.1	18.0				

STATEMENT I·4

Frequency of annual rainfall in the district

(Data 1901—1950)

Range in mm.	Number of years	Range in mm.	Number of years	Range in mm.	Number of years
1	2	1	2	1	2
0—100 ..	2	301—400 ..	3	601—700 ..	6
101—200 ..	6	401—500 ..	11	701—800 ..	2
201—300 ..	11	501—600 ..	7	801—900 ..	2

STATEMENT I·5

Normals of temperature and relative humidity

(JAMNAGAR)

Month	Mean daily maximum temperature °C	Mean daily minimum temperature °C	Highest maximum ever recorded °C	Highest maximum ever recorded Date	Lowest minimum ever recorded °C	Lowest minimum ever recorded Date	Relative humidity 0830 Per-cent	Relative humidity 1730* Per-cent
1	2	3	4	5	6	7	8	9
January ..	26.0	11.6	33.9	1933 Jan. 19	1.7	1935 Jan. 16	61	N. A.
February ..	28.1	13.5	37.2	1926 Feb. 26	2.2	1929 Feb. 1	68	N. A.
March ..	32.5	17.5	40.0	1946 Mar. 31	8.3	1905 Mar. 1	70	N. A.
April ..	35.3	21.5	42.8	1901 Apr. 29	12.8	1908 Apr. 4	72	N. A.
May ..	36.3	25.1	44.4	1903 May 21	16.7	1918 May 1	72	N. A.
June .	35.4	26.8	43.9	1927 Jun. 3	17.2	1917 Jun. 16	73	N. A.
July ..	32.4	25.8	39.9	1958 Jul. 3	19.4	1950 Jul. 14	79	N. A.
August ..	31.1	24.9	37.8	1954 Aug. 7	20.6	1924 Aug. 6	80	N. A.
September	31.8	23.7	41.7	1951 Sep. 30	16.1	1923 Sep. 29	79	N. A.
October ..	34.1	21.7	40.6	1952 Oct. 9	14.4	1954 Oct. 25	76	N. A.
November	31.6	16.9	37.2	1901 Nov. 5	8.9	1938 Nov. 30	60	N. A.
December	27.3	12.7	34.4	1955 Dec. 14	3.9	1930 Dec. 31	58	N. A.
Annual ..	31.8	20.1	..	..	..	..	71	N. A.

Hours I. S. T.—Indian Standard Time
*N. A. = Not available

STATEMENT I·6

Normals of temperature and relative humidity

(DWARKA)

Month	Mean daily maximum temperature °C	Mean daily minimum temperature °C	Highest maximum ever recorded °C	Highest maximum ever recorded Date	Lowest minimum ever recorded °C	Lowest minimum ever recorded Date	Relative humidity 0830* Per-cent	Relative humidity 1730 Per-cent
1	2	3	4	5	6	7	8	9
January ..	25.4	15.3	34.0	1957 Jan. 24	6.1	1929 Jan. 31	67	48
February ..	26.4	17.4	35.6	1920 Feb. 28	8.3	1901 Feb. 9	71	57
March ..	27.9	21.4	38.3	1958 Mar. 17	7.8	1905 Mar. 2	77	69
April ..	29.6	24.7	41.1	1932 Apr. 12	17.2	1903 Apr. 4	83	76
May ..	31.1	27.1	42.7	1959 May 22	20.0	1909 May 11	83	79
June ..	31.8	28.1	37.8	1951 Jun. 12	22.8	1936 Jun. 30	81	76
July ..	30.3	27.0	36.4	1958 Jul. 2	22.2	1952 Jul. 27	83	82
August ..	29.2	25.9	32.8	1954 Aug. 7	21.7	1908 Aug. 21	85	81
September	29.6	25.4	39.4	1929 Sep. 29	22.2	1909 Sep. 9	84	78
October ..	30.7	24.2	40.0	1951 Oct. 1	16.7	1949 Oct. 31	79	73
November	30.6	20.3	37.2	1901 Nov. 3	12.2	1938 Nov. 30	68	51
December ..	27.3	16.6	33.9	1932 Dec. 3	8.3	1903 Dec. 27	64	41
Annual ..	29.1	22.8	..	.. ..	..	..	77	68

* Hours I. S. T. = Indian Standard Time

STATEMENT I·7

Mean wind speed in km/hr

(JAMNAGAR)

January	February	March	April	May	June	July	August	September	October	November	December	Annual
1	2	3	4	5	6	7	8	9	10	11	12	13
9.0	10.0	12.7	15.9	21.6	21.7	20.6	18.7	13.7	9.0	8.4	8.4	14.1

(Bk) H-17—7 (Lino)

STATEMENT I·8

Mean wind speed in km/hr

(DWARKA)

January	February	March	April	May	June	July	August	September	October	November	December	Annual
1	2	3	4	5	6	7	8	9	10	11	12	13
13.4	14.3	15.3	15.8	18.8	21.7	24.6	20.6	12.9	11.1	11.7	11.9	16.0

STATEMENT I·9

Special weather phenomena

(JAMNAGAR)

Mean number of days with	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thunder	0.0	0.0	0.1	0.0	0.4	0.7	0.3	0.1	0.0	0.1	0.1	0.1	1.9
Hail ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dust storm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squall ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fog .	0.7	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	4.4

STATEMENT I·10

Special weather phenomena

(DWARKA)

Mean number of days with	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Thunder	0.3	0.1	0.1	0.1	0.6	1.4	0.6	0.0	0.1	0.2	0.4	0.1	4.0
Hail ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dust storm	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
Squall ..	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.0	0.0	0.6
Fog ..	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.8

CHAPTER II

HISTORY*

INTRODUCTORY

The District of Jamnagar as constituted at present forms one of the western parts of Gujarat, and the north-western part of the peninsula of Saurashtra The latter is now divided into six districts, Jamnagar, Rajkot, Surendranagar, Bhavnagar, Amreli and Junagadh ; whereas the southern half of the district of Ahmedabad forms a part of the peninsula, the upper connects it with the mainland of Gujarat. The district also includes the former Okhamandal. Porbandar lies to its south, and Rajkot to its south-east, east and north-east, whereas on the north-west is the Gulf of Kutch and the Arabian Sea on the west. A brief reference to these political and physical boundaries is necessary to understand the main or important events in its history narrated in the sequel, and particularly those of the last three centuries. For, the relations between Nawanagar and Kutch, and between Nawanagar and its neighbours were for the most part estranged.

Likewise a reference will be made to Porbandar, because it was probably through this part or because the Jethwas or Saindhavas possessed it that they could control the western sea. Secondly, in the 7th century and earlier, the then rulers reigned over the entire territory, the division between Jamnagar and Porbandar or two such separate states came into existence only after the foundation of Nawanagar in 1540. Thus the historical account up to this date deals with the undivided region, whereas after this date Porbandar, etc., have been excluded, but Okhamandal has been included, because in the latest re-organisation it forms part of the Jamnagar district. In such a treatment some inconsistencies are bound to be there.

PREHISTORICAL PERIOD

Nearly a century ago, when the *Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar* was first written, it was thought that only the coastal areas of Saurashtra were inhabited by man, whereas the interior was mostly a jungle. Nowhere this view, justified in the then state of knowledge based on inadequate research and exploration, has been proved to be wrong than in

*This chapter, particularly the period prior to the medieval history has been contributed by Dr. H. D. Sankalia of the Post-Graduate and Research Institute Deccan College, Poona.

the case of Saurashtra. For this part of India, open to influences from the west by sea routes as well as land routes the latter over an inhospitable country—dry desert land of Sind and Baluchistan, real city civilization had come by 2000 B. C. This was not confined to the coastal areas, but had spread all over the land. The urban life was followed by a series of less developed stages of culture, but at no time was the country deserted. This process had continued until today. Saurashtra thus occupies a crucial position in the early civilization of this land.

The advent of the city civilization was preceded by a state when man was a nomadic hunter and used, among other things, tools and weapons of stone. Metals were unknown as well as writing. This is prehistory, also called a history of preliterate society. Evidence of the existence of earliest stone-using man has been obtained at Rojdi on the Bhadar river, whereas stone tools of the succeeding period, known as Middle Stone Age, have been found at several places in Saurashtra, the notable sites being Rojdi, Jetpur and Dokra Nala near Dhrangadhra.

Still a later phase of the Stone Age, called the Late Stone Age is attested to by the widespread occurrence of tiny stone tools called microliths. So far very little systematic work has been done on these three Stone Ages in Saurashtra, but the small and big streams within the Jamnagar district, if scientifically explored, are bound to yield the necessary data. The most promising areas seem to be the Barda hills, Jetpur, and the tracts near Wadhwan. The former has outcrops of basalt and lime-stones which on occasions contain pockets of fine silicious stones like, agate, chalcedony and chert ; the latter also chert.

Fine glass—like stone called pitchstone or obsidian is available near Ranpur, south of Wadhwan, at Osham hill near Upleta, and at Rajula near Jafrabad. If utilized by Stone Age man, this would make very fine tools.

These few, very few indeed, clues are sufficient to indicate that the interior of Saurashtra was inhabited by men right from the Early Stone Age, that is at least 100,000 years ago.

This Stone Age man might have had relations with the Stone Age man of East Africa, for, it is believed on geological grounds,[1] that Saurashtra before it became an island was connected with Africa. Whatever it be, its relations with Kutch and Sind and to the islands in the

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1. Campbell, J. M., *Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar*, p. 78, 1884.

Persian Gulf and to Mesopotamia beyond have been proved by the discovery of numerous sites all over Saurashtra with typical pottery and other relics of the Indus Valley Civilization.

By about 2500 B. C. or so Saurashtra had begun to be colonised from Sind. Throughout the historic times, these immigrants should have first entered Saurashtra by crossing the Gulf of Kutch and the marshes, and occupied first what is today Jamnagar district, as so far evidenced by the discovery of numerous sites[1] bearing pottery (mostly potsherds). According to its fabric and types, it belongs to various periods, indicative of successive migrations. Without a first hand examination it would be difficult to say whether in every case the site does represent the Harappan or late Harappan settlement, but it is clear that as early as 2000 B. C. the whole district was fairly thickly inhabited.[2] So far only two sites, viz., Amra and Lakha Baval[3] in Jamnagar taluka have been partially excavated. These give some more idea of the nature of the Indus settlements in western Saurashtra; though until the reports on these excavations are published, a fuller picture of settlement is not possible.

When the Indus Civilization declined in Sind and the Punjab, and its maritime activities suffered because of the loss of trade with the Persian Gulf, its colonies in Saurashtra were either obliterated partly by natural causes such as repeated floods at Lothal, or were gradually reduced to village cultures. Gone were the well laid out cities or towns with their baked brick houses, gutters and wells, beautiful sturdy pottery, seals and toys. In their place had risen villages with mud wall houses and a different kind of pottery. Whatever literacy was then seems to have been lost as well, for now we have no trace of writing. The region within the present district of Jamnagar suffered a similar fate, to judge from the surviving traces of pottery from Amra and Lakha Baval.[4] Until the re-discovery of writing, and the introduction of iron and altogether a different kind of pottery in about 500 B. C. this state of things persisted in Gujarat-Saurashtra and many parts of India.

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1. Till today, according to the list supplied by the Archaeological Survey of India (Baroda), there are 16 Harappan and late Harappan sites in the district, whereas according to the list supplied by the Department of Archaeology, Gujarat State, Ahmedabad, there are 40 such sites (see Appendices I and II at the end of the Chapter). There are many sites common to both the lists.

2. Exactly which areas were preferred and which continued to be lived upon may be understood if known sites are plotted on a series of maps.

3. Ghosh, A. (Ed.), *Indian Archaeology, A Review*, p. 7, 1955-56

4. *Ibid.*, p. 7, 1955-56

This long period between c. 2000 B. C.—500 B. C. is called protohistory, according to one definition,[1] because it is a period which bridges the gulf between prehistory (various Stone Ages) and history, and secondly unlike many countries like England, India has a whole body of literature from the Vedic to the Puranic which though not written down at that time, embodies many elements of Indian life and culture still practiced by a large mass of the population.

Saurashtra, and particularly the district of Jamnagar is no exception to this conception of protohistory. For, according to the *Bhagavata* and *Harivamsa*, and Jain and Buddhist literature the Yadavas under Krishna had migrated from Mathura to Dwarka. And Dwarka, then known as Kusasthali, was the capital of Anartadesa or Anartaloka. It is not clear from these accounts whether Anarta was the name of the Okhamandal or of the western part of Saurashtra or of the whole of Saurashtra. The last alternative does not seem to be likely for, since the 4th century B. C. the area around Junagadh if not the whole of the peninsula was known as Surashtra.

Anarta is also a name of great antiquity, for it occurs in an inscription of A. D. 150, so there is reason to believe that the Puranic accounts were based on facts.

Consideration of the entire literary evidence in light of the recent excavations at Dwarka[2] definitely proves that the site of the present Dwarka was known by this name, at least by the beginning of the Christian era, and that the legend, about its being drowned under the sea has a factual base.

Its association with Shri Krishna and the Yadavas remain unproved. It is probable, however, that the proof of this legend or tradition will be found among the bearers of the culture with a distinctive pottery, such as the Prabhas ware, though as yet very few occurrences of this pottery are found at Dwarka or in the Jamnagar district.

According to Hindu tradition still extant, the earliest known conqueror of Okhamandal was Shri Krishna, called also Ranchodji, the eighth incarnation of Visnu, who after his seventeenth battle with Jara Sandh, king of Magadh Desh, fled from Mathura, and eventually arrived with his army at Okhamandal, which he subjugated after a hard struggle with the Kalas.

1. SANKALIA, H. D., *Indian Archaeology—Today*, Bombay, p. 27, 1962

2. SANKALIA, H. D., in *Excavations at Dwarka* by ANSARI Z. D., and MATE M. S., Poona, pp. 1-17, 1966.

He then assumed the sovereignty of the country and established his capital at Dwarka, on the banks of the Gomti[1] creek, which has been ever since regarded by orthodox Hinduism as a spot of the greatest sanctity.

Krishna was succeeded by his great grandson Vajranabh, who enjoys the saintly reputation of having built the present temple of Dwarkanath,[2] called also Trilok Sundar, signifying " the handsomest of the three worlds ". Many Hindus religiously believe that this temple was erected in one night by supernatural agency, under Vajranabh's direction, and they impatiently deride the common sense notion that it was built by human hands. Vajranabh was succeeded by Shatvir, his third cousin, and fourth in direct descent from Krishna. Certain it is that the whole of western and south-western Saurashtra, now included in the Jamnagar and Junagadh districts were colonized by the Yadavas, whose most important leader was Shri Krishna. The Yadavas ruled or occupied the region for nearly a century. When they perished in a family quarrel under the influence of drink, and after Shri Krishna died, Dwarka was submerged under the sea. Arjuna with the surviving members of the Yadava family consisting mostly of women and young children repaired to Hastinapura. The list of the countries through which he passed, and of the countries through which the Yadavas passed on their way to Anarta and Dwarka if critically examined and plotted would indicate the ancient line of communication between Saurashtra and the Gangetic plain.

The countries mentioned are Kuru, Jangala, Panchala, Matsya, Saraswati, Maru-Dhanva, Sauvira and Abhira. This would correspond to Southern Punjab, U. P. and Jaipur, Bikaner, and Jodhpur in Rajasthan. What Sauvira and Abhira here stand for, it is difficult to say, but it appears that lower Sind would be included in them.

This Yadava episode has to be treated as proto-historic or better legendary or traditional, until some facts are available for its acceptance as historical.

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1. Some people say that Gomti has its derivation from *go*, cow, and *mati* the renal secretion; because the water of the creek is held by Hindus to be as holy as the urine of the sacred cow, which they worship. Others say that its name is derived from Gautam Rishi an ancient sage who was permitted by Visnu to form the creek, so as to enable Hindus by performing their ablutions therein to obtain absolution from their sins.

2. Dwarkanath is derived from *Dwarka* residence (*dvar* or door) and *nath*, Lord or master. Some Hindus say, it means the residence of Krishna and others declare it to signify the " Lord of the door (or gates) of the ocean ".

ANCIENT PERIOD

History in the modern sense begins with the conquest of Saurashtra by the Mauryas, under Chandragupta, in c. 320 B. C. For this again there is no direct evidence. The Maurya occupation of Saurashtra has been inferred by the existence of the 14 rock edicts of Asoka at the foot of Mount Girnar at Junagadh and by the subsequent reference in the inscription of Rudradaman. This record mentions Pusyagupta and Tusaspha, as Rastriya (viceroy) in charge of Surastra under Chandragupta and Ashoka respectively.

Whether there were any subordinate officers or petty vassals under this viceroy for the different parts of Saurashtra including the present district of Jamnagar we do not know. Looking to its subsequent history, there should be at least two or three, corresponding to the present district officers.

The Maurya rule ended in about, 200 B. C. Between 200 B. C. and 100 B. C. possibly the Sungas, early Andhras or Satavahanas and the Indo-Greeks had by turn held Gujarat-Saurashtra, as we learn from brief reference to these regions in their records.[1] But no details can be had about the nature of this occupation, for want of detailed accounts.

The Indo-Greeks were ousted by the Sakas who entered India from Sakasthana (Seistan), conquered Abiria (Abhira) on the Indus, later Patalene on the mouth of the Indus, and the Greek provinces of Kutch and Surastra. From Abiria they proceeded up the Indus and conquered North India. The Jamnagar district must have felt the impact of this Saka invasion first, because it lay almost on the road of the invaders, both by sea and land. However, nothing tangible is known of this impact or the earlier Greek occupation, probably for want of search by trained workers.

In about 100 A. D. a branch of the Sakas, known as the Ksaharatas are found to be ruling over western Maharashtra and possibly Gujarat-Surastra for coins of their first king Bhumaka have been discovered in these parts. Rsabhadata, a son-in-law of the second king Nahapana made gifts to Brahmins at Prabhas. Though there is no numismatic or epigraphic evidence to say whether Dwarka and Pindarka were known at that time the excavations at Dwarka above referred to suggest that this region had first then been occupied by a people from Sind or Rajasthan.

It is, however, their successors the western Ksatrapas, now known as Kardamakas, who have left indelible stamp of their long rule of over 200 years over Surastra, though this is not at all commensurable with the length of their occupation.

1. SANKALIA, H. D., The *Archaeology of Gujarat*, pp. 8-9, 1941

While Junagadh claims the credit of their finest and longest record, as well as the remains of *stupas* and monasteries, at Gunda,[1] Halar and at Mulvasar,[2] Okhamandal, Jamnagar district, are stone inscriptions of the time of Rudrasimha, and Rudrasena. These are dated respectively in the Saka years 103 (181 A. D.), 122 (200 A. D.) and indicate in no uncertain terms that the Kardamakas (Western Ksatrapas) were in effective control of western Saurashtra.

From the very few details in these two records, we can say that not only the rulers, who were foreigners, but their generals and members of the public made public benefactions, such as building of the dam at Junagadh, or the construction of a well at Gunda[3] by Senapati Rudrabhuti, who was an Abhira and the erection of a memorial stone (*lasti*) on the bank of a tank at Mulvasar by the sons of a merchant (*Vanija*).

The record further tells us that though the Sakas had introduced their own era, they still followed the ancient Indian method of dating by the *tithi* of the two halves of a month and *naksatra*. The mention of the day which was introduced after the Roman contact had not then come into vogue. Probably every *tithi* was not suitable or regarded as auspicious, because the Gunda inscription records the construction on the *muhurta* of the Rohini *naksatra*. Lastly, the name of the general as well as the ruler suggests that they were followers of God Rudra (Rudrabhuti,-Simha,-daman). However, from the prevalence of Buddhism and Jainism in and around Girinagara (ancient Junagadh) and place-names like Vasai (from ancient Vasati, or habitation of Buddhists or Jains) about 12.9 km. north of Dwarka, we might postulate the existence of Buddhism and Jainism in the Jamnagar district during the Ksatrapa period, when both these faiths were patronised. From this it would appear that Vasai and other sites go back to that period though the extant temples there are of the 12th-13th century.

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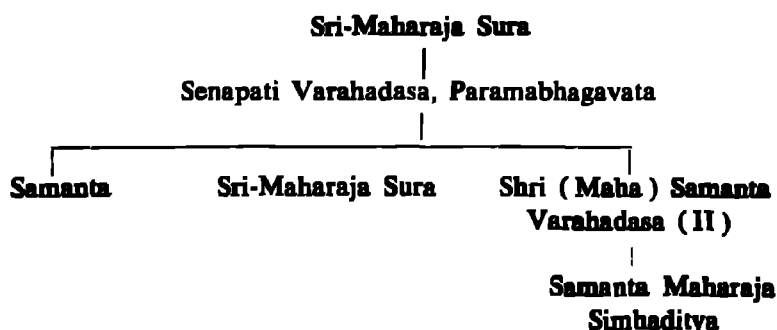
1. *Epigraphia Indica*, Vol. XVI, p. 233

   The well in which the stone inscription was found at Gunda should belong to the Ksatrapa period.

2. *Ibid.*, Vol X., Appendix, p. 98

   The earliest ancient relics of the Ksatrapa period are the stone slabs bearing inscriptions

3. Which is no other than the ancient Rasopadra village, for the inscription was found in 1880 in a disused well at Gunda, and the letters of the record were in excellent state of preservation, the stone probably fixed into the side of the well fell into the well at a later date, and was thus well preserved. This inference though not made by the earlier editors of the record is quite obvious.

The later grant of Simhaditya does not mention the former Sura (I). Combining the data from both the grants, the genealogy is as follows.

The two grants are dated in the Gupta-Valabhi eras 230 and 255 respectively, that is 549 and 574 A. D. The effective ruler seems to be Varahadasa who might be a Senapati under the Guptas, but became semi-independent when the Maitrakas followed similar course, or he might have imitated them. The interesting thing is that whereas one grant calls Varahadasa II-*Mahasamanta*, the second calls him only a *Samanta*. This Varahadasa was the most important ruler. For he is credited not only with the victory over the king of Dwarka, but with the buildings of temples and mahaviharas, gardens (*aramas*) and *satras* (charitable institutions, particularly free food). The name Varahadasa along with the *birudas* (titles) *Paramabhagavata* imply that the rulers were followers of Visnu, though Simhaditya might be a worshipper of the Sun as well. The Garulakas could not have been the only vassals of the Maitrakas. At present, however, the Maitrakas alone seem to occupy the field for more than two centuries.

Early in the eighth century appear the Saindhavas who, until recently were known from only three records; a clay seal from Vala,[1] and the Dhinki[2] and Morvi[3] copper plates, of which one is proved to be a forgery, and of the other only the second half is available. Then six copper plates which were discovered at Ghumli[4] were published in 1952. It is these which provide the history of the Saindhavas and incidentally of western Saurashtra or the Jamnagar district. The Saindhavas illustrate what has been happening in the history of western India, particularly Kutch and Saurashtra over and over again. Owing to some pressure--political, economic or even climatic—the rulers in Sind move down to Kutch and

1. *Indian Antiquary*, Vol. XII, pp. 155 and 274-5; and Vol. XXXVIII, p. 145
2. *Ibid.*, p. 151
3. *Ibid.*, Vol. II, p. 257-8
4. *Epigraphia Indica*, Vol. XXVI, pp. 185-226

then cross over to western Saurashtra. Here they settle down or fan out inland. The Saindhavas who are expressly called so in five or six of their records were originally inhabitants of or rulers in Sind. Where exactly in Sind they belonged to is not mentioned. When this region was conquered by the Arabs early in the 8th century, then a member of their family-Pusyena migrated to western Saurashtra. Here he chose the protection of the Barda hills.[1] These hills or mountains beginning further inland attain a commanding position of 609·6 metres, and run north-south for nearly 32·2 km. parallel to the coast. Their chain-like formation made a fortification wall from which one could watch the movements of any invader by the Arabian Sea. The Saindhavas, in addition, had founded or improved, the port of Porbandar. Thus they ruled and guarded the *Apara* or western Saurashtra with the help of a navy for over two centuries (c. 740 to 920 A. D.).

Before discussing the various aspects of their history, it would be advisable to give the Saindhava genealogy as known from the nine records.

The Saindhava Genealogy

1 Jayadratha
|
2 Ahivarman
|
3 Pusyena, *maharaja, mahasenapati*
or
**Pusyadeva, Ksitipati*
c. 734—754
|
4 *Krisnaraja* (I)
c. 754—774
|
*5 *Agguka* (I)
c. 774—794
|
*6 *Ranaka* (I)
c. 794—814
|

*7 *Krisnaraja* (II) 814-824		9 *Jaika* (I) Charter B 834 849 A D
*8 *Agguka* (II) Charter A G. E. 513 = 832 A. D. c. 824-834 c. 834-859	*10 *Chamundaraja* 849-874 A. D	13 *Agguka* (III) 849-869
	11 *Agguka* (IV) Charter C 874-899 A. D. G. E. 507 = 886 A. D.	14 *Ranaka* (IV) Charter D G E. 555 869-889
Ranaka (III) Charter C c. 859-879	*12 *Jaika* (II) 899-919 Charter F G. E. 596	15 *Jaika* (III) 889-909

1. The name of the hill and the village seems to be very old, as it is referred to in the Arabic accounts. There it is spelt as Barada.

* These rulers belonged to the Senior Branch.

This genealogy has been a composite one, and it is difficult to understand it at first glance. According to the interpretation here accepted there were in all 15 rulers. Though the family was spilt up, after Ranaka (I), into a Senior or Elder and Junior (Younger) branch, the members of the family continued to bear the traditional names. Thus we have two Krisnaraja, four Agguka, three Jaika, and 4 Ranaka, but only one Pusyadeva and one Chamundaraja. According to Dr. Altekar who edited the six copper plates discovered at Ghumli, the persons whose names have been shown in bold type (underlined twice) belonged to the main line. It must be said that another view, as expressed by M. M. Shastri Hathibhai Hari Shankar is possible. But since the problem has been discussed by Dr. Altekar it is not necessary to go into it again. The real difficulty is that fairly full genealogy is given in Charter F only and out of six Ghumli records, only four are dated (designated as A. D. E. F. by Altekar). Thus the evidence is incomplete. Instead of re-opening the question of succession, we would rather turn to other aspects of Saindhava rule in western Saurashtra.

Though there is no reference to the Saindhavas in any one of the numerous Maitraka records, nor to the Maitrakas in the Saindhava records, the fact that the clay seal of the first king Pusyena was found at Vala, the ancient Maitraka capital, suggests that both the rulers knew each other. Probably Pusyena or Pusyadeva might have helped the Maitrakas against the Arab attacks. In this he might have used his navy, if there was one at that time. The Maitraka influence is also seen in his title Senapati and the adoption of the Gupta-Valabhi era in the Saindhava kingdom, replacing the former Saka era.

The Saindhavas were also known outside, particularly to Chaulukyas of Gujarat, Maharashtra and Karnatak and to the Gurjaras of Rajasthan and Central India. For long before the discovery of the Ghumli plates, a reference to the defeat of the Saindhavas and others by the Tajikas (Arabs) was made in a grant of Pulakesi Janasraya dated the A. D. 738-39. Later they were overwhelmed by the Gurjara emperor Nagabhata.

In fact Pusyadeva or Pusyena appears on the scene just at the time, (c. 735) when the Arabs had first raided western India, which at that time was split up into several large and small kingdoms and which according to a contemporary Indian record, the inscription of Gujarat Chaulukya king Pulakesi Avani-Janasraya [1] consisted of the Saindhavas, Kachchhas, Saurastras, Chapas and Gurjaras. This is a also corroborated by the Arab historians.[2] If by the chief of Saurashtra, the Maitrakas of Valabhi are

1. *Bombay Gazetteer*. Vol. I, part I, *History of Gujarat*, p. 109 and Annals of Bhandarkar Oriental Research Institute, Vol. X, p. 31, and *The Classical Age*, (Bharatiya Vidyabhavan's *History and Culture of The Indian People*), Vol. III, p. 172-3

2. ELLIOT and DOWSON. *History of India*, Vol. I, p. 444. 1867

meant, then it might be inferred that at this time the Saindhavas were still in Sind. Who the ruler of Kachchha was not known. After this raid or several such raids, for the Arab historians refer to those under Hasham, the Governor of Sind, the Saindhavas under Pusyena or Pusyadeva might have migrated to western Saurashtra. His status is expressly stated as *Mahasenapati*—a great general, in his own seal. Probably he was welcomed by the Maitraka king-either Siladitya V or VI. The migration might have taken under his father Ahivarman, for Muhammad-bin-Qasim had conquered Sind in c. A. D. 712. Any way these incidents were the precursors of the momentous change that was to come within 50 years. But strange to say there is no hint at all in any of the Maitraka records. Stranger still is the fact that the mighty Maitrakas with their empire disappeared after about 770 A. D., but the Saindhavas, their one time vassals, continued to rule on for another 200 years. Whether this happened because of the internal dissensions the Maitrakas had become weak and their feudatories like the Chapas of Wadhwan, and the Saindhavas became strong or in the final war with the Arabs of Sind, the Saindhavas sided with the invaders and as a result were allowed to survive, or the Gurjara-Pratiharas conquered the whole of Saurashtra driving out the Maitrakas, but permitted their feudatories like the Chapas, Chaulukyas of Una, and the Saindhavas to rule their respective fiefs. The last alternate is most likely for the Chapas and the Chaulukyas do show their allegiance to the Gurjaras. While the Saindhavas do not explicitly say so, except for a veiled reference to Ramabhadra in one of their grants, still not once do they use imperial titles such as *Parama Bhattaraka, Maharajadhiraja* but are content with the titles *Mahasabda*.

MAHASAMANTADHIPATI [1]

Thus the Saindhavas were feudatories, probably of the Gurjara-Pratiharas. But they were more independent than their contemporaries (as were the later rulers of Jamnagar during the Moghal period). They issued land charters without referring to their overlord, whoever they were, and further called themselves the masters of the western sea (*Aparasamudradhipati*) and "Ornament of the Western Surastra Mandala".

It is no less intriguing that though the family was split up into the main and subsidiary or senior or junior, still irrespective of their positions in the family, there is no variation in the title used by the donor-ruler. Hence we are not able to determine the exact limits of each subdivisions, and the

1. DR. A. S., ALTEKAR, who edited these grants thought (*Ephigraphia Indica*, XXVI, p. 218) that the title of the ruler-Ranaka who issued Charted D, was only *Samantadhipati*. This view is wrong, because all claim the title *Mahasamantadhipati*.

jurisdiction of the ruler. With Ghumli, called Bhumilika[1] or Bhutambilika in all the six other records, as the capital, the Saindhavas had established a kingdom in western Saurashtra. The size of this kingdom may be judged from the villages granted and the administrative units referred to in their records. So far two units are mentioned. The first is called Pachchhatri Pradesika which occurs in charters A and B. The second is called Suvarnamanjari Visaya. Thus this Apara-Surastra Mandala had at least two sub-territorial divisions, while the territorial unit Visaya is well known, Pradesika is not, though there is nothing new about the term itself. The term *desa* was increasingly losing its wider connotation, and was applied by this time to designate small territorial divisions. The Saindhavas went a step further and have used the same term for designating a still smaller division by prefixing *pra.*

What the relation in size and status between the Visaya and Pradesika was it is difficult to decide in absence of fuller evidence. The size of Pachchhatri Pradesika seems to be at least 40 km. in one direction. For in Charter A Dhankatirtha and something else are donated to a Brahmin of Somesvara, that is Somnath. Dhankatirtha is Dhank, 40 km. east of Ghumli. The headquarter of the territorial division Pachchhatri is identified with Pachchhatri 9·7 km. west of Ghumli.

The second charter gives the extent of this unit in another direction, viz., north, north-east. It records the grant of Bhetalika which is identified with Bhatela. Within this subdivision there was the already famous Dadhipadraka village. To its west was the Enturaka-grama, south Bhattagrama, north Bada-anakagram, and a village Sedhakhaika and to the east Varatroyi river, and to the south a Bhattagrama, known as Chonnaka.

Dadhipadra is probably Deolia, 9·7 km. west of Ghumli. Sedhakhaika is Shedkai, and Varatroyi is Vartu river. The remaining places have not yet been identified. But there are numerous 'old sites' shown on the map. Of these Bhatia, also 3·2 km. east of another Deolia, or about 8 km. south-west of our Deolia could be Bhattagrama. All these places with the headquarters of the subdivisions are to the north, north-west of Ghumli and within a radius of 16-24 km.

The second sub-division was Suvarnamanjari Visaya. It is mentioned in Grants D. E. F. But the identification of this unit is difficult. For the boundaries of donated places, viz., Pippalipadra,[2] Harisenanaka,[3] Chhapanaka,[4] are not specified. These are tentatively identified respectively with

1. *Indian Antiquary*, Vol. XII, p. 155. It was called Bhumli in about 1839 when Jacob visited the place See *Journal of Royal Asiatic Society*, p. 73, 1839
2. *Epigraphia Indica*, Vol. 26, p. 215
3. *Ibid.*, p 218
4. *Ibid.*, p. 223

Piplia; Hariasana, Chavand. The last is about 24 km. north of Junagadh. Near it was Isvaranaka, which might be Isvaria. Sonwaria, 19 km. north-east of Ghumli probably represents the ancient Suvarnamanjari.

How far northward, southward and eastward the Saindhava kingdom extended it is difficult to estimate. Most probably, Girinagara (Junagadh) was the limit on the south, south-east; the Mauchandra hills on the north-east, the Gulf of Kutch and the Arabian Sea on the north and east forming the natural boundaries. Thus what was Halar some 40 years or a century ago, the Saindhava kingdom was in the 9th century.

Such a small kingdom was overstaffed to judge from the long list of officers in grants A, B, D. These mention the following :

1	Mantri*	(Adviser or Minister)
2	Purohita*	(Priest)
3	Amatya	(Chief Minister)
4	Janapada*	(Literally country or people, here probably representatives of the people)
5	Yuvaraja	(Crown Prince)
6	Rajasthaniya*	(Viceroy)
7	Pramatr*	
8	Baladhikrta	(Commander-in-chief)
9	Uparika*	(Provincial 'viceroy', superior to No. 10)
10	Visayapati	(Head of Visaya)
11	Saulakika	(Custom Officer)
12	Dussadhasadhanika	(Probably officers for apprehending "dacoits"?)
13	Chorddharanika	(Police Officers)
14	Vaiksepika	(?)
15	Chata	(Irregular and regular soldiers)
16	Bhata	
17	Senapati	('General')
18	Desadhipati	(Head of Desa)

However, in grants C, E, and F those with an asterisk are dropped, that means that only officers Nos. 3, 5, 8, 10, 11, 12, 14, 15, 16, 17, 18 were possibly there, though one may still doubt the existence of both the Senapati, and Baladhikrta. The rest are essential. What No. 14 Vaiksepika connotes is difficult to say. The term does not occur in the Maitraka records. However, what we miss badly in this list is an officer or officers in charge of the navy, which the Saindhavas must have had, since they were masters of the "Western Ocean".

The occasions on which the grants were made, and the persons to whom these were made give an inkling of the conditions in the Saindhava kingdom. These might be further checked against the archaeological evidence. Three of the grants are made on the full moon day of Asadha, on the new moon day (of an unspecified month) and on the Udagayane (Uttarayana) respectively to Brahmins who were masters of all the four Vedas, or of the *Rgveda, Samaveda, Yajurveda* and *Atharvaveda*. The *gotra* of the first one is Samkrtya. This *gotra* seems to appear for the first time in Gujarat-Saurashtra. Other two grants of villages were made for a group of temples dedicated to Hari. Haridasva, Vinayaka, and Divine Mothers and for a Nanna-mathika, founded by a merchant from Bhillamala. What the last was it is difficult to say. Perhaps an examination of the ruins of Ghumli might tell us whether it was a temple or an educational institution as the word Matha connotes. The grantees were Brahmins from Bhillamala, and the village were Somesvara (Somnath near Prabhas), and Gomutrika (identified with Gomata[1] near Gondal), situated in Karyatakachha.

To the Garulaka-Maitraka Saindhava period belong probaly the small shrines at Dwarka,[2] the Sonkansari group,[3] of temples on the Barda hills and the Sun temple at Pachhatar[4], and also probably the earlist temples at Pindara[5] which we know existed in the 10th century[6]. Ethnographically Saurashtra is thus shown to be a great mix up even today, is reflected in the names of persons--kings, queens, writers, composers, Brahmanas, merchants, mentioned in inscriptions. The Saindhava epigraphs provide additional evidence. Though the family was from Sind and claims descent from Jayadratha, the ruler of Sind in the *Mahabharata* in the Vala Seal, as well as in Charter F, still but for the names of three kings Pusyadeva, Chamunda, and Krisnaraja. Other have names like Agguka and Jaika, the latter though Prakrit-looking are un-Sanskritic and indicate the former foreign origin of the family. Likewise, the engraver of the Morvi plate was Deddaka. That some of these were foreigners is clear from the fact that the composer of Charter A is called "an ornament of the Sakas", his own name being

1. SHASTRI, H. G., *Maitraka-kalin Gujarat*, Vol. I, p. 243, 1955
2. SANKALIA in *Excavations at Dwarka*, by Ansari, Z. D. and Mate, M. S.
3. SANKALIA, H. D., *The Archaeology of Gujarat*, pp. 64-65
4. *Ibid.*
5. SUBRAHMANYAM, R., "*Pindara and its Antiquities*" *Journal of the Oriental Institute*, M. S. University, Baroda, Vol. XV, pp. 419-431, 1964-65
6. Recently an attempt has been made to place the temple at Gop to 600 A. D. and also the rest-Pachhatar-Pindara (Gop style) and Pindara (fully developed) between 650-850 A D. (see Soundara Rajan, K V., "The Age of the Gop Temple", *Journal of the Oriental Institute*, M. S. University, Baroda, Vol. XV, p. 191, 1964-65.

Kapila, and father's Vikkata.[1] That after some 700 years the Sakas, though otherwise Hinduised, should retain their individuality is indeed strange but interesting. It may be that this Kapila did not belong to the earliest Sakas, but to the groups who were continually entering India.

The title 'Rana' is applied to certain Rajput rulers only, for example, to the rulers of Udaipur and Porbandar. Its application to the latter can now be explained. Three members of the Saindhava family of Ghumli bear the name 'Ranaka', from which the word 'Rana' is derived. And it does not appear to be a personal name, but one of the hereditary names of the rulers in the family, like Jaika and Agguka. But since the word Ranaka is a prakritized form of 'Rajna' or 'Rajanaka', both meaning a 'king', it would appear that this became a title of the ruling family of Jethwas of Porbandar, who it would be shown presently, have descended from the Saindhavas.

At present five theories hold the field. (1) Wilson traced the origin of the term Jethwa to the term Jat, (2) Jackson to the White Huns, and in particular to the Yetha, the shortened Chinese form of Ye-ta-i-li-to or Epthalite which was the name of the ruling class of the White Huns, (3) Bardic tradition to Jetha, the 95th ruler in the traditional genealogy of the rulers of Porbandar, (4) M. M. Shastri to the Senior (Jyestha) branch of the Saindhavas (according to him represented by the line of Krisnaraja), and (5) Dr. Altekar[2] derived the term 'Jethva' from Jayadrath, the epic founder of the family. He argued that Sanskrit 'Jayadratha' becomes Jetha in Prakrit through the intermediate forms Jairath and Jaiath. *Va* was added at the end of the term Jetha under the influence of the quantity law of phonetics.

How far Altekar's theory is linguistically sound I would not venture to say,[3] but according to the recent evidence-the Ghumli plates of Baskalareva[4] the country around Ghumli is called Jyesthukadesa. One may, therefore, say with Dr. Sircar[5] that this puts an end to all speculations for the term 'Jethwas' could be derived from 'Jyesthuka'. But instead of closing the controversy like this one should inquire whether this Jyesthuka is not a Sanskritization of some Prakrit or a foreign word. If it itself is a Prakrit form of Sanskrit

1. *Epigraphia Indica*, Vol. XXVI, p. 197
2. *Ibid*., p. 193 and for reference to the four earlier views.
3. Dr. Katre, S. M. has kindly examined the entire question. Dr. Altekar's equation or derivation is wrong. Dr. Katre also thinks that the suggestion put forward later by me is very probable.
4. *Epigraphia Indica*, Vol. XXXI, p. 11
5. *Ibid*., p. 16

Jyestha, then M. M. Shastri might be right, viz., that the senior branch of the Saindhavas ruled the Porbandar-Ghumli region and hence traditionally it came to be called 'Jethwa'. But it is also possible that the Saindhavas belonged to the ruling family of the White Huns called Yetha, as Jackson conjectured without much data a century ago. But there is little doubt, however, that the Saindhavas like the Sakas and others were foreigners, but were soon absorbed in the ever expanding Hindu society. Hence Jyesthuka could be a Sanskritization of some from like Yetha, Jetha as Garjjanka and Hammira of Gazni and Amir (!) respectively.1

Whatever be the truth, with the patronage of Brahmina and learning, eclectic view of Hinduism, including support to Jainism (for Dhank was a centre of Jainism), encouragement to Sanskrit, art and architecture, as evidenced by fine, ornate Sanskrit in their land grants, ruins of temples, and other monuments, the adoption of the Gupta-Valabhi era (with decimal notation and not symbols as interpreted by Altekar), the Saindhavas gave a further lease to modified Gupta culture for 200 years after the disappearance of the Maitrakas from Saurashtra. What their navy achieved to safeguard their independence as well as that of Saurashtra and western India against repeated Arab attacks has to be imagined for want of positive data from any source. At this distance of time the period of 200 years might appear small, but looking to what has happened during the last 200 years one must credit the Saindhavas for their stable rule. And this is important, for it keeps alive the Ranaship tradition by which the later rulers of Porbandar style themselves.

Though there is no direct evidence, two things suggest that Baskaladeva was feudatory of Mularaja of Anahilapura of Gujarat. First the use of the Vikrama era. For nearly one thousand years, only the Saka and the Gupta eras were current in Saurashtra. The Chaulukyas were the first to introduce it in Gujarat. And probably because of this Baskala had to use this era in Ghumli. Secondly, the grant is made to a Yajurvedi Brahmin of Anahilpura. This is the first and the earliest independent mention of this city, outside the Chaulukya records. Two or three other details are of equal or greater significance. First we are informed, that Baskala ruled from Bhutambilika, located in Mahadurga adhikarana, which was situated in Jyesthuka-desa in Nava-Surastra-Mandala. The significance of the later expression has been dwelt upon at length in the earlier paragraph.

From the administrative point of view we learn that besides the two or three Visaya (districts), the names of which we get in the Saindhava records, the area or the region of the Barda hill, about one sq. mile, had the status of

1. As mentioned above Dr. Katre thinks that the suggestion is quite sound.

an *adhikarana*. Thus the fortified citadel itself formed a small territorial unit. While the Saindhavas called this region western (apara) Surastra, Baskala designates it as Nava-Surastra. Thus he anticipated the foundation of Nawanagar State by several centuries.

Equally important is the reference to the port of Porbandar called "Paura-Velakula".[1] Though not mentioned in the Saindhava or other records, a port must have been there, perhaps from very early times. What 'Paura' signifies it is difficult to say. It might simply denote a city or a town from 'Pura', the whole expression meaning a "port city".

Pindataraka (Pindara)[2] figures as a holy place for the king took bath in the Yajnavatatirtha. Even today, however, dirty and noxious-smelling the *kunda* be, devotee Hindus invariably take bath here. So traditions in India should not be lightly treated as does Sircar.[3] Here is a living testimony of a thousand years and more.

This record tells us how carefully the boundaries of the donated land were marked by boundary stones (called Ghotika)—a fact which, I think, occurs for the first time in an ancient land grant. The donation was witnessed by *Sthana Mahajana*, not Board of Elders as Sircar interprets the expression, but 'local' *mahajana* and the grant written by Pari (ksaka)= Parikha who was originally a superintendent. In this one record we are given a realistic picture of the machinery for recording land grants. Wisely it omits references to all sorts of high officers which are not likely to be there in a small State. The grant seems to be important in another way as remarked by Sircar; in showing the origin of the practice of representing the royal sign manual by the *aksara* 'Sri' in bold characters followed by the rulers of some of the erstwhile Saurashtra States. For this inscription concludes with 'Sri' in bold letters.

This is the first and last time that we hear of a feudatory of the Chaulukyas ruling in the present Jamnagar district. Traditionally the Jethwas were believed to have ruled at Ghumli until the end of the 13th century. From the nature of the extant ruins at Ghumli, it would appear

1. Since the Saindhavas claim to be a maritime power, they should have had a port, probably where Porbandar is today. But there is no reference to it in their grants. Hence it is possible that the Arabs might have built a port there which was later taken over by the Saindhavas and their successors, and the name Sanskritized.

2. The *kunda* at the place might go to the 10th century as proved by the epigraphical reference. Some more *kundas* may be discovered in any survey of the monuments in Jamnagar district.

3. *Epigraphia Indica*, 31, p. 13

that the Jethwas or their descendants did rule the place and the surrounding region until the end of the Chaulukya rule in Gujarat. While nothing definite can be said regarding their relation with the Mers or the Huns and other Central Asian tribes on which Jackson has written so much, this much has been proved. First that the ancestors of the Jethwas belonged to Sind, that as the tradition says three earliest ancestors had fish (*makara*) on the banner, and hence they were called Makaradhvaja. This title is true because the Saindhavas had fish as their emblem. All the six Saindhava plates, and the one Morvi plate have fish engraved on them, that their acceptance of Hanuman as one of their ancestors was at a much later date, probably after the 3rd revival of the power at Ghumli.

What happened to Ghumli or to the Jethwas ? Who destroyed them ? Nothing definite is known. Tradition attributed the destruction to the curse of Son Kansari, a daughter of a coppersmith. If true, Valabhi and Ghumli were destroyed, for identical reasons ; King's lust. But, this as pointed out by Burgess, does not seem to be reasonable. For Ghumli was destroyed in the 15th century, probably by the Jams from Sind, whereas Son Kansari's incident took place in the 11th-12th century.

Several archaeological monuments of the period have been discovered. The small, beautiful temple, now attributed to Rukmini at Dwarka, some parts of the main temple of Dwarkadhish at Dwarka as well as others in the compound, and the step-well (*vav*) and the Navlakha temple at Ghumli[1] can on the style of architecture be assigned to the Chaulukya (Solanki) period. To this period also belong the Ram temple at Baradia[2] about 6·5 km. north-east of Dwarka, temple of Guhaditya.[3] at Varvala, and Junagadh temple at Vasai. These beautiful temples with most artistically carved ceilings recall the classical temples in North Gujarat at Sidhpur, Sunak, Kandoran, Modhera, and prove in no uncertain way the efficient government, peace and prosperity that must have prevailed in Okhamandal during the Solanki rule in Gujarat. For, in other times, this distant corner of Gujarat-Saurashtra had become the den of pirates. Also ruins of stone and mud fortification are seen at Dwarka, Khambhalia and at a number of places. The earliest was, however, at Ghumli in the Barda hills. A clear reference to it is made in the epigraph of Baskaladeva[4] (above, page 68). Here one might still find traces of the ancient city of Bhutambilika of the 8th-10th century.

1. SANKALIA, H. D., *Archaeology of Gujarat*, 102 and Burgess, James, *Report on the Antiquities of Kathiawar and Kuchh*, p. 181, 1876

2. *Annual Report, Archaeological Department, Baroda State* for 1936-37 (1938), p. 3, pl. IV, and for 1938 (1939), pl. II

3. *Ibid.*, p. 5, 1938

4. Its ruins were seen and described by G. L. Jacob (*Journal of Royal Asiatic Society*, pp. 73-80, 1839).

From the end of the 13th century until the foundation of Nawanagar by Jam Raval in 1540 we are unable to say anything specifically about this region. The whole of Gujarat-Saurashtra was conquered by the Muslims, their rule lasted for nearly 400 years and is divisible into three sub-periods.

The establishment of a semi-independent kingdom of Nawanagar falls into the 2nd sub-period. Two things are noticeable. The constant attempt by the Nawanagar chiefs to maintain their position, at the same time to enlarge their territory. Thus externally it was a perpetual battle with the Muslim overlords, first of Ahmedabad and then of Delhi or their viceroys stationed at Ahmedabad.

NAWANAGAR

The history of Jamnagar district after A. D. 1300 is really the history of Nawanagar State—its foundation and growth through various vicissitudes, until its recognition as a First Class State in 1863, and later merger in the Indian Union in 1947. The long period of nearly 400 years may be subdivided into seven phases as follows.

(i) The Rise of Nawanagar under the Sultanate and Early Moghals

(ii) Nawanagar during the Moghal rule

(iii) Nawanagar during the Maratha rule in Gujarat-Saurashtra

(iv) Nawanagar during the British Period

(v) Nawanagar's merger with the Saurashtra Union in 1948, and the latter forming a part of the Indian Union.

(vi) Nawanagar in Bombay State

(vii) Nawanagarin Gujarat State

For the period after c. 1300 A. D. bardic accounts, accounts written by historians and other writers, archaeological relics, memorial stones (*palias*), towers of victory, *pirs* and *dargahs*, etc., are very useful sources. The Siva temple at Magderu, the Kalika Mata temple (or Kagdepru temple) at Dhrasanvel and Juni (or Navi) Dhrawad, the Gokesvara temple at Laurali (Lowrali), and the Siddhasvara Mata at Sindhavai Mata, for which detailed descriptions are not available, have a *garbha griha* (the shrine chamber), the *Sabhamandapa*, and a porch. So it is presumed that they belong to the late medieval[1] period (c. 15th century). This would also be the period of the

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1. *Annual Report, Archaeological Department*, Baroda State, p. 5, 1938

famous temple of Dwarkadhish (the Lord of Dwarka, viz., Shri Krsna) at Dwarka, though there is little doubt that it was first built in the 6th-7th century (as evidenced by the discovery of temple parts1 in the excavations close by), then rebuilt in the 11th-12th century and finally renovated and rebuilt in the 17th century after destruction at the hands of Mahmud Begada in the 15th century. Ruins of stone and mud fortification at Jamnagar are also seen. This was first built by Meraman Khavas.

Many memorial stones2 (*palias*) have been found in the district. The well-dated *palia* at Bhuchar Mori3 (details of which are given elsewhere *in this Chapter) was erected probably soon after the battle of 1591 A. D.* 2 *palias* at *Aramda*4 near Dwarka show a ship with a mast. They are attributed to the Vaghers. From the few readable letters and dress of the people engraved on them these *palias* might not be earlier than the 14th-15th century. Many towers of victory, erected during the last two or three centuries, are seen at Jamnagar. At Beyt Dwarka (ancient Shankhoddhra) there is a mausoleum5 of *Pir Haji Karmani* who died in A. D. 1604. There is also said to be an inscription of Firozshah's time.6

Traditionally the Jams of Nawanagar belong to the Puranic Yadavas or Jadavas. Their other branches are said to be the Bhatis of Jesalmer, the Chudasamas of Saurashtra, and the Jadejas of Kutch and Saurashtra. However, as shown above, it was a common practice of all foreign tribes who entered India, as soon as they were absorbed into the 'Hindu' fold, to trace their descent to the Sun or the Moon or to Manu or to a Puranic/ Vedic family. In the case of the Jams, Jethwas and many other Saurashtra tribes or people we know definitely that they come from Sind, which for centuries has been the receiving centre, for Central Asiatic tribes. Moreover, the Yadavas have never been credited to be the original inhabitants of Sind. Moreover, the names like Bhatis, Jadejas, and Jam itself seem to be foreign

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1. See Ansari, Z. D., and Mate M. S., *Excavations at Dwarka*, Poona, pl. IV, 1966
2. Saurashtra, like Karnatak, is known for its memorial stones erected in memory of heroes who gave their life in battle, cattle-raid or fighting against the sea-pirates or kidnappers of women. A few of these have been cited here,
3. COMMISSARIAT, M. S., *History of Gujarat*, Vol. II, p. 25
4. *Annual Report, Archaeological Department*, Baroda State, 1934-35 (36), p. 20, pls. VI—VI-a
5. No record of *pirs* and *dargahs* and other Islamic monuments, which were built in the district, are available.
6. *Annual Report, Archaeological Department*, Baroda, p. 13, 1934-35 (36)

words, whereas in Sind a Muslim ruler was called Jam in the 15th century.1 The Jam was Sanskritised into Yama in a XVIIth century inscription, from Satrunjaya.2 In the same record Halar is changed into Hallara, and the name of the ruler given as Shri Satra(u)salya. Nawanagar, situated on the Rangmati near its confluence with Nagamati about 3 km. from the old Jethwa fort of Nagnah is called 'Navinapuram'.

It is interesting to note that in the bardic history recorded by Mavdanji (*Yaduvamsa-Prakasa*, p. 25) the Jams who are regarded as descendents of the Yadavas, Nos. 136-137 (81st and 82nd from Shri Krsna), are said to have ruled in Egypt, and migrated to Kabul via Syria, Iran and Afghanistan. Thus we have a striking confirmation of our view that the Jams, whether descendents from the Puranic Yadavas or not, were in truth foreigners—a central or west Asian people.

1. JAM RAVAL (1535-1562)—The foundation of Nawanagar State is credited to Jam Raval. He found it comparatively easy to establish a new kingdom in the distant corner of Saurashtra, because at the time, Bahadur Shah, the last Sultan of Gujarat was waging a losing battle with Emperor Humayun. In fact, Gujarat had already been conquered in 1535-36. In about A. D. 1535, 1536, 1537 Jam Raval invaded Sorath and conquered the Jodia and Amran *parganahs* from the Dedas and Chavdas, Nagnah bandar from the Jethwas, and the Khambhalia *parganah* from the Vadhels, and in A. D. 1540 founded the city of Nawanagar. During the reign of his successors, successive Jams contrived to consolidate their rule over the portion of Saurashtra which came to be known as Halar, because Jam Raval was a descendant of Jam Hala and was hence called Halani. After his conquest of the north-west portion of Sorath, he called it Halawar, now by contraction called Halar. In the meantime the Jethwa and Vala Rajputs, joining with the Kathis and Vadhels marched against Jam Raval, who met them at the village of Mithoi of the Khambhalia *parganah*. Jam Raval was victorious, and prosecuting his success he drove the Jethwas out of Halar, the Kathis to the south of the Bhadar river, the Dedas to the east of the Machhu river, and the Vadhels across the Okha Rann, and acquired Bakota, then a great *parganah* to the eastward, and extended his dominions in a southerly direction as far as Kandorna. When Jam Raval effected these conquests he was accompanied by his brothers Hardholji, Rawoji, and Modji, to whom he distributed the fruits of his conquests. On Modji, he bestowed Khandhera. Hardholji, the founder of the house of Dhrol, conquered that *parganah* from Dhamal Chavda. Rawoji got Khambhalia and its subordinate villages.

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1. COMMISSARIAT, M. S., *History of Gujarat*, Vol I, 1938
2. *Epigraphia Indica*, Vol. II, p. 64

Jam Raval had three sons (1) Jiyoji, (2) Vibhoji, and (3) Bharoji; of these the elder son Jiyoji was killed by a fall from his horse near the temple of Rojhi Mata, and his son Lakha being but a child when his grandfather died, received the *parganah* of Khilos in apanage, and Vibhoji, his uncle, the younger son of Jam Raval, succeeded to the chiefdom; Bharoji received Jambuda in apanage.

2. Jam Vibhoji (1562-1569)—Jam Vibhoji succeeded to the *gadi* in 1562 and reigned till 1569; he confined his attention to consolidating the dominion acquired by his father; he had four sons (1) Satarsal, (2) Bhanji, (3) Ranmalji, and (4) Veraji. Satarsal succeeded his father, and Bhanji received Kharedi, Ranmalji Sisang, and Veraji Hadian in apanage.

3. Jam Satarsal otherwise called Jam Sataji (1569-1608)—Jam Satarsal succeeded his father Vibhoji to the *gadi* in A. D. 1569. This was a time of great confusion in the affairs of Gujarat, and indeed for many years little supervision had been exercised over Sorath. Taking advantage of the confusion at Ahmedabad, Jam Satarsal absorbed many villages of the Gujarat domain and asserted his influence over many of his weaker neighbours, or that he became entirely independent. It was in his reign that the Jams of Nawanagar, were, by the permission of the Sultan Muzafar allowed to coin *koris*, which are called by the Muhammadan writers Mahmudis. In A. D. 1577 Shahabuddin Ahmad Khan was appointed Viceroy of Gujarat, and one of his first measures was to send a force against Junagadh, then held by Amin Khan Ghori, the son of Tatar Khan Ghori. Amin Khan, however, applied for aid to Jam Sataji of Nawanagar, and Mirza Khan, nephew of the Viceroy who commanded the imperial army, was compelled to raise the siege and retire thence to Mangrol and thence to Kodinar. Here the allies pursued him, and he was forced to give battle and was defeated and after losing many men and all his baggage and elephants escaped wounded with difficulty with the remains of his force to Ahmedabad. It was for the assistance given by the Jam on this occasion that Amin Khan Ghori ceded to him the *tapas*[1] of Jodhpur, Bhod and Chur In 1583 A. D. the escape of the Sultan Muzafar plunged all Gujarat again into war and rebellion, and for a short time the last of the Gujarat Sultans regained possession of the capital of Gujarat. But he was forced to fly to Rajpipla, whence after a time he repaired to Loma Khuman, a Kathi chieftain of Kherdi, and hence endeavoured to interest Amin Khan Ghori of Junagadh, and Jam Satarsal of Nawanagar, in his behalf. They took his money but did not dare to take the field against the imperial forces.

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1. A *tapa* is a subdivision of a *pareganah* less than a *chovisi* or a subdivision containing 24 villages. A *tapa* usually contains from eight to twelve villages, but some times contains more than 12.

though the Jam allowed him to take shelter in the Barda hills, to punish which Mirza Khan Koka marched on Nawanagar. But the Jam by a timely submission averted a battle, and Mirza Khan returned to Ahmedabad. In A. D. 1591, however, Muzafar again entered Sorath during the viceroyalty of the Khan Azam Mirza Aziz Kokaltash and was joined by Jam Satarsal, Daulat Khan Ghori and Loma Khuman. After some manouvering the armies came in sight of each other near Dhrol. In some of the preliminary skirmishes, the Jam and Muzafar were worsted, and the Jam returned to Nawanagar. But his son Ajoji, and his minister Jasa Ladak, continued the fight. Though the Moghals led by the viceroy Khan Azam himself, suffered very heavy losses, still they won the day with the help of their reserve forces, and the combined forces led by Ajoji was routed. Ajoji and Jasa were slain and Muzafar fled. This battle took place on 18th July 1591 at the place called Bhuchar Mori which is about 1·5 km. to the north-west of Dhrol. So great was the loss sustained by Nawanagar, that since that day the word Bhuchar Mori has in Halar been almost synonymous with a massacre. The spot where Ajoji died is still hallowed by a *palia* (herostone) erected in his memory, whereas the palace walls (Darbargadh) are decorated with frescoes depicting the battle.[1]

Relying probably upon bardic accounts, *Saurashtra-no-Itihas* says that at the crucial moment Daulat Khan and Loma Khuman went over to the Moghals. As soon as Jam Satarsal came to know this he hurried to the capital for its protection and his son Ajoji who was being married at the moment, left the marriage pandal and joined the battle with 500 of his friends.

Next day, after the battle Khan Azam marched on Nawanagar, but Jam Satarsal had fled thence with Sultan Muzafar and Daulat Khan Ghori to the fortress of Junagadh. The city of Nawanagar was pillaged by the Moghal troops and Khan Azam, making that town his headquarters, sent Naurang Khan, Syad Kasim, and Gujar Khan, against the fortress of Junagadh. When the Jam and Sultan Muzafar heard of this they left the fortress and took shelter in the Bardo hills; Daulat Khan Ghori, however, remained in the fort. But on the very day that the imperial forces invested the fortress, Daulat Khan died of his wounds. His followers, however, held the fortress on behalf of his infant son, and the imperial arm was unable to make any impression on it. At last Khan Azam himself joined the army, but was obliged to raise the siege and return to Ahmedabad, leaving a deputy in Nawanagar owing to the scarcity of supplies.

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1. COMMISSARIAT, M. S., *History of Gujarat*, Vol II, 1957, (Plates facing pp. 17 and 24)

2. DESAI, S. H., *Saurashtra-no-Itihas*, Rajkot, p. 287, 1957

After recruiting his army, he again after eight months marched against Junagadh. The Jam who was now an outlaw and hiding in the hills, sent his *vakils* to the Khan Azam, and agreed to aid him in any way he chose in the conquest of Junagadh, provided his country were restored to him. Khan Azam agreed on condition that the Jam should supply his army with grain during the siege and agree to pay tribute. To these terms the Jam agreed, and was accordingly restored to his dominions, after the reduction of Junagadh. From A. D. 1591 Nawanagar was enrolled among the tributaries of the empire, though from this date it was considered a separate State, and was not included in Sorath, though subordinate to the Moghal Foujdar of that province.

Jam Sataji devoted the close of his long reign to setting the affairs of his State in order and placing the government on a firm basis. An inscription of the closing year of his reign calls him Yama Shri Shatrushalya. He reigned till A. D. 1608. Jam Sataji had three sons, viz., (1) Ajoji, slain at Bhuchar Mori, (2) Jasoji who succeeded him, and (3) Vibhoji, who received Kalavad in *giras*. Vibhoji with the assistance of Nawanagar conquered Rajkot, Kunad, Chibhda and Sardhar, and giving Kalavad and Kunad (near Jodiya) to Nawanagar in return for their aid, retained his other conquests. From him sprang the chieftains of Rajkot.

4. JAM JASOJI (1608-1624)—Jam Jasoji succeeded his father in A. D. 1608 and reigned for sixteen years. The only notable event of his reign was his visit to the Emperor Jahangir when he camped on the banks of the Mahi in 1616 A. D. Jam Jasoji repaired thither to pay his homage, and presented 50 Kutchi horses as a *nazranah*, and received from the Emperor gifts due to his rank. Jam Jasoji married the sister of Raj Chandrasinghji of Halvad. One day he and the Jhali Rani were playing at chess together and he took her knight (called in Gujarati, horse). The Rani losing her temper said, "It is no great thing for you to take a horse from me a woman, but if you can take a horse from my brother, then you are indeed a Raia". Jasoji rose up displeased and remembering her taunt, sent men to Halvad, outwardly to condole with the Raj Sahib on the death of his son, and contrived to capture him by a stratagem and convey him to Nawanagar. But he released him afterwards at the intercession of a Nagar Brahmin named Shankardas. On this occasion he taunted the Jhali Rani at her brother being a captive, and she treasuring up this grudge against him, contrived some years after to administer poison to him, of which he died in 1624. Jam Jasoji dying without a male issue, was succeeded by Lakha, the son of his elder brother Ajoji.

5 JAM LAKHAJI (1624-1645)—Jam Lakhaji succeeded his uncle in A. D. 1624 and commenced to increase his army and assert

independence. In his reign the coinage of Mahmudis or Jamis as the inhabitants of the peninsula used to call them, increased very largely. The Jam, owing to the laxity of the imperial rule in Sorath, and his distance from the seat of Empire at Delhi, had formed such an exaggerated idea of his power, that in 1640 he withheld the payment of tribute. Azam Khan marched at once on Nawanagar and compelled the Jam not only to pay up arrears of tribute, but also to promise to cease the coinage of Mahmudis, a promise which, however, was broken as soon as the Jam found himself strong enough to do so. Azam Khan moreover compelled the Jam to surrender certain outlaws and refugees who found shelter from other parts of Gujarat, and to promise to abstain from harbouring bad characters in future. Jam Lakhaji died in A. D. 1645 and was succeeded by his son Ranmalji.

6. JAM RANMALJI (1645-1661)—Jam Ranmalji mounted the throne in 1645 and married a Rathod lady of the Jodhpur house, but as he was enfeebled by excesses in early youth, this lady had no hope of offspring. Being of an ambitious temperament, she gave out that she was with child. With the aid of her brother Govardhan Rathod, and a servant of the house named Malik Isa, she introduced into the female apartments a fine male child, and pretended that it had been born of her, and named him Satoji (also called Lakha). Raisinghji, brother of Ranmalji, who transacted most of the business of the State, and looked forward to succeeding his brother, was naturally opposed to this move on the part of the Rathod lady. He persuaded his brother to confide to certain nobles and others that the child was spurious, and that he wished him (Raisinghji) to succeed him. The Jam did so; and shortly after saying this, Jam Ranmalji died.

7. JAM RAISINGHJI (1661-1664)—As soon as the death of Jam Ranmalji was known, the Rathod lady and her brother Govardhan proclaimed Satoji as his successor, and the *bhayats* were invited for the funeral ceremonies. On this occasion it was arranged by the Rathod party, that women only should enter the darbar and that the *bhayats* should remain without. Raisinghji's party, however, arranged that a number of armed men should be introduced into the darbar in the chariots dressed up as women. As soon as they had entered, they massacred the garrison, and expelled the Rathod lady, her brother and Satoji, and seated Raisinghji on the throne. The Rathod lady, accompained by her brother and faithful follower Malik Isa, betook herself to Kutb-ud-din, the *Foujdar* of Sorath, then acting Subahdar during Jaswantsinghji of Jodhpur's absence in the Deccan. Kutb-ud-din at once marched on Nawanagar. Jam Raisinghji was, however, slain in the fight. Kutb-ud-din took Nawanagar, and named the city Islamnagar. Tamachi, son of Raisinghji, who was then a minor, escaped to Kutch, and thence returning to Okhamandal ravaged the Nawanagar dominions, and from his exploits was called Tamachi Tagad or Tamachi the Reiver.

8. JAM TAMACHI (1673-1690)—In 1673 A. D. at the intercession of the Maharaja Jaswantsinghji of Jodhpur, then Viceroy of Gujarat, Jam Tamachi was restored to the throne of Nawanagar, although during the reign of the Emperor Aurangzeb, the city of Nawanagar itself remained in the hands of a Muhammadan Governor, the Jam residing at Khambhalia. Jam Tamachi built the fort of Raval in A. D. 1679. In addition to restoring the throne of Jamnagar, *mansabs* were granted to Tamachi, his brother Phalji of Bhanvad, and his eldest son Lakha, without any control from the *dagh* office. By an imperial *farman* dated July 25, 1672, twenty-five villages were transferred to the Jam, but he was forbidden to interfere with the customs arrangements established in the capital and was required to supply a contingent of 1,000 cavalry, and an equal number of foot soldiers to the Subahdar of the province when required.[1] However, the Jam never sent his army or himself served in the imperial army.

9. JAM LAKHA (1690-1709)—He was succeeded in A. D. 1690 by his son Lakha, who reigned till A. D. 1709 and was succeeded by his eldest son Raisinghji.

10. JAM RAISINGHJI (1709-1718)—Jam Raisinghji ascended the *gadi* in A. D. 1709. He expelled the Muhammadan *Foujdar* from Nawanagar, and returned thither from Khambhalia. During his reign Daud Khan Panni, the viceroy of Gujarat, visited Nawanagar in one of his progress in 1714-15, and levied the customary tribute. In 1715-16 Maharaja Ajitsinghji of Jodhpur, was appointed viceroy of Gujarat and went into Zalawad and Halar to levy tribute. After levying tribute from Jaswantsinghji of Halvad, he marched upon Nawanagar, where he was opposed by the Jam, aided by Jaswantsinghji of Halvad. The Jam was compelled to pay Rs. 300,000, as tribute and present a *nazaranah* of twenty-five Kutchi horses.

11. JAM HARDHOLJI (1718-1727)—Jam Raisinghji's younger brother Hardholji in A. D. 1718 murdered Raisinghji and usurped the throne. A slave girl of Raisinghji's, concealing his young son Tamachi in a box, fled with him to Kutch, where she implored the aid of his aunt Bai Ratnaji of Bhuj, who warmly espoused her nephew's cause. She wrote to her brother Raj Pratapsinghji to give his daughter in marriage to Mubariz-ul-Mulk Sarbuland Khan, the Subahdar of Gujarat, and also to marry the daughter of one of his cousins to Salabat Muhammad Khan Babi, the commander of the imperial forces in Gujarat. The Raj did so, and by their aid seated Jam Tamachi on the throne of his ancestors.

12. JAM TAMACHI (1727-1743)—Jam Tamachi in gratitude to his helpers, bestowed Hariana on Raj Pratapsinghji of Halvad and gave the villages of Charakhdi, Trakuda, and Daiva to Salabat Muhammad Khan

1. COMMISSARIAT, M. S., *History of Gujarat*, Vol. II, p. 188, 1957

Babi. In return for the shelter and assistance received from Rao Desalji of Bhuj, Jam Tamachi mortgaged to him the mahals of Balambha, Amran, etc. In the year of Tamachi's installation, Mubariz-ul-Mulk levied 3 lakhs of rupees as tribute from Nawanagar, and Rs. one lakh the next year with some difficulty. In 1742, Momin Khan, the then Subahdar of Gujarat had to march against Nawanagar, as the Jam resisted payment of tribute. After standing a siege of 20 days, the Jam agreed to pay Rs. 50,000, and on this sum being paid Momin Khan retired. When Jam Tamachi ascended the *gadi*, he, remembering what had befallen his father, dismissed all his *bhayats* to their villages. Amongst these was Halaji of Paddhari, known as Kakabhai, a leading spirit in Tamachi's restoration in conjunction with Kutch, Halvad, and the Ahmedabad Subah. Incensed at what he considered Tamachi's ingratitude, Halaji determined to kill him. He sent his connection by marriage, Jhala Karsansingh, with a large following on pretence of paying the Jam a visit. Karsansingh finding an opportunity murdered Jam Tamachi, and managed to rejoin Halaji, who went into open rebellion against Nawanagar. On hearing of the murder of Jam Tamachi, his daughter Rajkunwarbai, who had married Ramsingji of Jodhpur, and was at this time on a visit to her father, formed a bold resolution. She dressed up her father as though he were alive, and placing him at a lofty window of the palace showed him to the people, who believing he was alive, pursued Karsansingh. In the meantime as Tamachi had no son, Rajkunwarbai counselled his two Ranis to each of them adopt a son secretly, and pretend that they had given birth to sons. The Ranis did so, and the eldest of the boys was named Lakhaji and the younger Ajoji, and Lakhaji was proclaimed Jam in place of his father.

13. Jam Lakhaji (1743-1768)—Jam Lakhaji reigned for twenty-four years and nine months. He married Bai Jawuba of Halvad, who came to Nawanagar accompanied by Nanji, Bhawan and Meraman Khawas. Meraman Khawas, who was a man of character and ability, soon acquired great influence in the counsels of the Jam, who was of weak character, and easily fell under his influence. This was, however, most unpalatable to Bai Jawuba, who was joined by several influential persons. About A. D. 1756, suddenly closing the palace gates, they put Nanji Khawas, brother of Meraman, to death. Meraman, however, not dismayed by this incident collected his followers and without waiting for scaling ladders caused his men to mount on each other's shoulders. Thus they entered the palace, and after a severe contest slew most of the guard and took Bai Jawuba prisoner. Meraman Khawas conducted the ministry in a totally independent fashion, treating the Jam as a mere puppet. Things went on in this way until the death of Jam Lakhaji in A. D. 1768, when his infant son Jam Jasoji was raised to the *gadi*.

14. Jam Jasoji (1768-1814)—Jam Jasoji's long reign of 46 years was divided in two phases, viz., (i) when Meraman Khawas was the *de facto*

ruler and had the Jam completely under his sway and (ii) when the Jam ruled on his own and asserted his authority after the death of Meraman Khawas in the year 1800.

Meraman and Bhawan Khawas having now only a minor to deal with, assumed the entire power, and kept Jam Jasoji under surveillance. Rao Godji of Kutch considering this a good time to assert his claims for compensation for his exertions on behalf of Jam Tamachi, prepared an army to invade Halar, and wrote threatening letters to Meraman Khawas. Meraman Khawas, however, far from acceding to any of his demands, marched at once with a large force on Balambha, and before the Rao could cross the Rann captured the town and expelled the Rao's *thanahdars*. All the cannon and munition of war in the fort fell into the hands of the Nagar Army, and the Rao was forced to recross the Rann return to Bhuj not only without effecting anything, but having lost Balambha which had been in his possession. Meraman now turned his attention to Haloji (called Kakabhai) of Paddhari, who had gone into rebellion and seized the fort of Modpur and some of the surrounding country. Meraman besieged Modpur, and during the siege Haloji was killed by a musket ball and the place surrendered.

The successes of Meraman increased his importance and power which became exceedingly distasteful to the late Jam's widow Jawuba, who accordingly withdrew from Nawanagar, on pretence of performing a pilgrimage to Nathdwara in Udaipur territory, and proceeding to Dhrangadhra commenced openly to plot the removal of Meraman. That artful minister affecting ignorance of her designs, persuaded her to return to Nawanagar, and on the day of her arrival procured her assassination.

His next measure was to invite the celebrated Dewan Amarji of Junagadh to co-operate with him in the conquest of Positra in Okhamandal, and the chastisement of the Vaghers. Enormous plunder fell into the hands of the invading forces. A misunderstanding, however, sprang up between Meraman and Dewan Amarji over the newly built fort of Betholi. But finally they came to terms on the condition that this fort should be dismantled and the Dewan marched off with his army. In A. D. 1783 Meraman led an army against Amarji Dewan, but was repulsed. Meraman repenting his folly in quarrelling with the influential family of Dewan Amarji, made peace with that minister, and joined him in an expedition against the Rana of Porbandar, whose territory they laid waste. In A. D. 1784, Dewan Amarji was assassinated, and his son Dewan Raghunathji was in A. D. 1793 invited by Meraman to Nawanagar, and granted a high rank and important office, and his younger brother Ranchhodji also joined him there. In 1788 A. D. Meraman Khawas built a fort round the city of Nawanagar and also strengthened that capital. In A. D. 1792, Meraman Khawas entering Kathiawar proper at the head of a large army, humbled the Kathis of

Santhali, Kotda-Pitha, Babra, Kariana, Bhadli, Barwala, Anandpur, Bhadla, and Jasdan ; and *thanahs* of Nagar troops were placed in these towns. Wajsur Khachar of Jasdan, however, obtained the restoration of Jasdan by surrendering Atkot.

In A. D. 1794 the Jadeja chieftains of Halar excited a disturbance to remove Meraman and rescue Jam Jasaji from his state of tutelage. Meraman Khawas at once led an army against the confederates, and laid waste the *parganah* of Sardhar under Rajkot. At this time Rawal Vakhatsinh of Bhavnagar was warring against the Kathis and camping at Jasdan. Nawab Hamid Khan of Junagadh had brought an army to aid the Kathis, but Meraman Khawas intervened. and made peace between Junagadh and Bhavnagar.

No sooner did the Jadeja confederates see that they were unable alone to oppose him, then they applied to Kutch for aid, and included Jamadar Fateh Muhammad whose power was then supreme in Kutch, to cross the Rann at the head of a powerful army, to avenge the ancient grievances of the Kutch Darbar. Bhawan Khawas marched to oppose him, and encamped at the village of Khakhrabela ; but Fateh Muhammad, executing a skilful flank movement, contrived to pass him and marched to Paddhari whither Bhawan Khawas followed him. After some skirmishing the Kutch troops were victorious, and Bhawan Khawas and his army retired to the capital. Fateh Muhammad avoiding the capital, plundered the Halar country as far as Khambhalia, and then returned. As these incursions had been secretly encouraged by the Jam himself and his Rani Achhuba, Meraman Khawas exercised a still stricter supervision over him. The Jam fretted sorely at his control, and again invited Rao Raidhanji of Kutch and the Jadeja confederates to rescue him from thraldom. Their intrigues were, however, put a stop to by the arrival of a Maratha army in A. D. 1794, under Aba Shelukar, Lieutenant of the Peshwa at Ahmedabad. Meraman Khawas, by the payment of large sums, induced the Marathas to march and lay waste the *parganah* of Gondal, another of the confederates, Rajkot having suffered severely at Meraman's hands previously. In A. D. 1795 Meraman Khawas marched into Okha to chastise the Vaghers, and wrested from them Ganga Gurgadh, etc., on the east side of the Okha Rann. In A. D. 1797 Jam Jasaji and his brother Sataji contrived to escape from surveillance, and again endeavoured to shake off the yoke of Meraman Khawas, but the Minister surrounded them and forced them to surrender and kept a stricter watch on their movements than ever. For two whole months he confined Jam Jasaji in his own (the minister's) palace. In this year Bhawan Khawas died Shortly afterwards in the same year, viz., A. D. 1797, Fateh Muhammad again crossed the Rann, but Meraman Khawas on this occasion opposed him with so formidable an army that Fateh Muhammad was glad to refer the disputes between Kutch and Nawanagar to arbitration and returned without

fighting to Kutch. In A. D. 1798 Meraman Khawas fearing lest some day he might be ousted from power by his many enemies, obtained from the Jam written deeds assigning to him Jodiya, Balambha and Amran as hereditary possessions. In this year, Fateh Muhammad and Rao Raidhanji of Kutch besieged Nawanagar itself, and nearly made themselves masters of the town, but were repulsed by the activity of Meraman Khawas.

In 1799, Amin Sahib, son of Jamadar Hamid, set out from Baroda to levy the Kathiawar tribute. Meraman sent an envoy to his camp at Wankaner, agreeing to pay tribute at Shivram Gardi's rates. Thus securing the neutrality of the Gaekwad army, Meraman despatched Dewan Ranchhodji with a powerful army against Bhanvad, which was held by a hostile *bhavat* in league with Fateh Muhammad. Ranchhodji was wounded in the siege, and owing to the dissatisfaction of the troops the siege was raised. In the meantime Fateh Muhammad laid siege to Nawanagar. In this strait Meraman sent Dewan Raghunathji, brother of Ranchhodji, to solicit aid from Shivram Gardi, who was then levying tribute in Panchal. He met Shivram at Bhadla and brought him towards Nawanagar when, however, Meraman heard of their coming towards Nawanagar, he began to fear that they might unite to destroy him. He, therefore, went to Dhunvav and had a private interview with Fateh Muhammad, and persuaded him to withdraw. This effected, he wrote to Dewan Raghunathji to bring Shivram Gardi no further as everything had been arranged. The Dewan, who had persuaded Shivram to come to a certain distance, felt bound to pay his expenses, and accordingly assembling the patels of the adjacent Nawanagar *parganahs*, he levied from them a contribution which he paid to Shivram and dismissed him. Meraman was displeased with his action in the matter, so Raghunathji left the capital and camped at Dhrol.

In A. D. 1800 Meraman Khawas died after a most active and memorable rule. Though he is said to be "totally unscrupulous", and ambitious, Wilberforce-Bell includes him among the three great men produced by Saurashtra at a critical time, who possessed powers of fighting with those of organization and statecraft.[1]

The Jam on his part was so delighted to gain his independence from the yoke of his minister that he abstained from interfering with the sons of Meraman who became independent *talukdārs* and occupied himself in exercising his unchecked authority. One of his first measures was to lead a strong army into Kathiawar in A. D. 1801, in which year he destroyed the fort of Jasdan and sending for the Dewan Raghunathji to join him,

1. Wilberforce-Bell H., *The History of Kathiawad From The Earliest Times*, p. 185, 1916

levied exactions under the name of Asv *vera* (Horse tax) and *nazaranah* (present) from the lesser *talukdars* of Kathiawar and Zalavad and from some of the Goghabarah villages. After this expedition, Jam Jasoji increased his army, and adopted an aggressive policy both towards his *bhayats* and the neighbouring talukas, and many of his *bhayats* went into outlawry. This restrained him from making other distant expeditions. Jam Jasaji took possession of the fort of Kandorna belonging to the Rana of Porbandar who appealed to the Gaekwad and British Government for help. Colonel Walker marched on Kandorna, which he took in November, 1807 and restored to the Rana on the 5th December of the same year. In 1808 an engagement between the British and the Jam was made by which he renounced piracy.

The Jam behaved in a very headstrong manner, and refused to grant apanage according to the custom of his house to his brother Sataji, who sought redress from Colonel Walker and the Gaekwad, who in vain pressed him to satisfy his brother's just claims. At the same time the Rao of Kutch also preferred claims against Nawanagar, and implored the British and Gaekwad interference. The Jam, however, remained inaccessible to all advice, given by the British and Gaekwad authorities. While affairs were in such an unsatisfactory state, an Arab in the Jam's employ shot a British Officer at Gop and fled to the Jam's fort of Modpur for shelter, and when a demand was made for the surrender of the murderer, the Jam refused. Hostilities were now no longer unavoidable, and the British and Gaekwad army, commanded by Captain Carnac and Fatehsingh Rao Gaekwar in person, marched upon Nawanagar early in 1812 A. D. After a little fighting, the Jam was forced to sue for peace, and to execute a treaty on the 23rd February, 1812, whereby he agreed, (1) to surrender the murderers of the British Officer. (2) to destroy the fort of Modpur, (3) to settle the claims of Kutch, (4) to give Ranpur and twelve villages to Sataji in apanage, (5) to pay a succession duty of Rs 25,000 to Fatehsingh Rao Gaekwar, and (6) to restore the Sarapdad *parganah* to Dhrol, and other minor provisions. He was also required to include a fresh engagement to prevent infanticide.

In A. D. 1813 Jamadar Fateh Muhammad crossed the Rann and made yet another descent upon Halar. Dewan Ranchhodji (the author of the Tarikh-i-Sorath) marched from Kutiana to the Jam's assistance. The armies met near Hadiana, and a skirmish began. But Fateh Muhammad losing heart sent Sundarji Shavji, the British native agent, with a letter from Captain Carnac, Resident of Baroda, directing a cessation of hostilities. A truce was accordingly granted on Fateh Muhammad agreeing to pay compensation for the mischief he had done.

In A. D. 1814 Jam Jasaji died, and was succeeded by his brother Sataji, after a reign of nearly 47 years.

15. JAM SATAJI (1814-1820)—Jam Sataji when he succeeded to the *gadi* was enfeebled by opium and other excesses, and had no children, nor had he any hope of offspring. Jam Jasaji's widow, Rani Achhuba, therefore, adopted a son named Ranmalji, who was the son of Jadeja Jasaji of Bhanvad, and Sadodar. Before his death Jasaji had appointed Jagjivan Devji as the minister of the State. The official conducted the affairs of the taluka, Sataji being little better than a prisoner in the hands of his Arab Jamadars. Rani Achhuba was, however, dissatisfied that more power was not vested in her, and she encouraged one Motiram Buch to plot against Jagjivan, and with her aid Motiram commenced to intrigue. At this time, certain Maskati Arabs with the connivance of Motiram obtained possession of the forts of Kandorna and Paddhari. Jagjivan now sought the aid of the British and Gaekwad Governments, who sent a force against Kandorna and Paddhari, and capturing both the places handed them over to the Jam in A. D. 1816, and expelling the Arabs who sought shelter with Sangram Khawas in the fort of Jodiya. Sataji's reign of 6 years is not eventful, except for the intrigues of the Khawases. The Jam besought the English and Gaekwad armies to punish them for sheltering outlaws against him and accordingly a force under Colonel East marched against them. Sangram Khawas lost heart, and surrendering his possessions, went to Morvi under the British guarantee. Finally through the mediation of the British and Gaekwad Governments Sangram Khawas received the *parganah* of Ambran in *jagir*, and Sundarji Shavji, the native agent of the English Government, obtained the *parganahs* of Jodiya and Balambha in farm for 8 years for a yearly payment of 1,15,000 Jami *koris*, though the author of the Tarikh-i-Sorath says that the revenue of those *parganahs* exceeded 2½ lakhs of *koris*. He, however, engaged to pay the instalments of the sum promised by the Jam for the British and Gaekwad aid. During his tenure of this farm the trade of the port of Jodiya was first developed. Jam Sataji died in A. D. 1820 and was succeeded by Jam Ranmalji.

16. JAM RANMALJI (1820-1852)—Jam Ranmalji, the adopted son of Sataji, succeeded to the throne in A. D. 1820, and quickly began to show signs that he intended to be master in his own dominions. He acted vigorously and drove away his mother's advisers. Jamadar Fakir Muhammad, who, at the instigation of Bai Achhuba and Mutiram Samalji, had attempted to carry on the Government, was by him expelled from the city. In A. D. 1824 the Jam led an expedition against the Rahus of Bara and reduced them, and in A. D. 1829 he married with great pomp Bairaj, daughter of Thakor Wajesinghji of Bhavnagar.

During the famines of 1834, 1839, 1846, Jam Ranmalji imported rice and other grains in ships and distributed them to the needy. This attracted people from far and near. But he gave all without distinction. As part of relief measures he also built the Kotha and Lakhota and excavated a tank near these palaces. Engagements with the British exempting from

duty vessels entering his ports from stress of weather were executed by the Jam in 1846 and 1849.

Ranmalji was a great *shikari*, and had hunted many lions and panthers. An event which seems to have passed unnoticed took place during his reign. According to Shri S. H. Desai three actors after tying wings flew from the palace in 1820; two failed, but the third succeeded and reached the village of Theba.

17. VIBHAJI (1852-1895)—Vibhaji succeeded his father Ranmalji to the *gadi* in 1852. The new Jam was a warrior and a statesman. During the rebellion of the Vaghers of Okha he was put to much expense in endeavouring to protect his State from their raids. He assisted the British against the Vaghers by giving services of the head of his police, Popat Velji, for the suppression and capture of the rebels.

Vibhaji was more enlightened than his predecessors, and had the welfare of his subjects in mind. A number of measures for the improvement of administration and providing amenities to the people were initiated during the course of his long rule of 43 years. He established Courts of Civil and Criminal Justice in 1864, and published local laws and adopted British Acts. Judiciary was thereby brought within a more easy reach of the people. The Jam then turned his attention towards revenue reform and in 1866, in place of the old wasteful and oppressive custom of framing out the mahals to favourites, he appointed paid servants of the State (*Wahiwatdars*) to administer the different districts. This reform removed a source of great evil, for the practice of farming revenue had resulted in oppression of the cultivators who were in many cases left barely sufficient to live upon.[1] In 1872, he introduced moulds for the copper coinage instead of having roughly cut and hammered copper coin as had previously been customary. In the next year he commenced to coin gold *koris*, at his mint in Nawanagar, but so many counterfeiters arose that it was found necessary very soon to discontinue that coinage.[2]

Vibhaji undertook several works of public welfare. He constructed a metalled road to, and wharf at Bedi Bandar, the port of Nawanagar, in 1863, where he made arrangements for the supply of drinking water to the people. He built *pucca* roads from Nawanagar to Rajkot, Dhrol to Jodiya, Nawanagar to Bedi and Rozi, Khambhalia to Salaya, and implanted trees on the road side. He built light-houses at Bedi, Jodiya and Salaya. The foundation stone of the Nawanagar water works was laid in 1871 and

1. WILBERFORCE-BELL, H., *The History of Kathiawad From The Earliest Times*. pp. 221-222, 1916
2. *Ibid*., p. 232

completed in 1875. Foundation stones of many other works of public welfare were also laid in 1871. During the same year he donated Rs. 22,250 to the Col. Anderson Fund for the Rajkumar College at Rajkot Foundation stones of a vegetable market and a hospital in Jamnagar were laid in 1875. The two buildings cost Rs. 78,000 to complete. During the same year a high school in Jamnagar was opened, and a Municipal Committee for the town under the aegis of the State Government, established. The Committee was entrusted with the responsibilities of construction and repair of roads, sprinkling of water, lighting, etc. A library with books, periodicals, and newspapers was also started for the benefit of the public. On account of a severe famine called the *Chotrisa* in 1878, thousands of people from outside flocked to the city of Jamnagar. But the Jam dispensed relief to all without distinction. He started several relief works, imported foodgrains in ships from outside, and distributed grains and clothes to the poor. To provide better facilities of water to the people of Jamnagar city, construction work on the Panju Bhat's tank was undertaken during the same year, and a big engine was fitted there. Education, in Kathiawar, had by now made such progress that it was considered appropriate to entrust the more important States with their own educational arrangement. As a result of this change introduced in 1892, education progressed rapidly in Nawanagar State. The Jam also gave financial help to deserving students to enable them to prosecute their studies.

The Jam did not have any male issue by his Rajput wives. In 1872, he obtained permission of the British Government to recognise his illegitimate son Kalubha from his muslim concubine as his heir, on condition that he should be well educated and be fit to rule. But all attempts to train him for the high position of a ruler having failed, he was pronounced unfit to succeed and was removed with his son to the fortrees of Ahmednagar. The Jam was then permitted in 1878 to adopt the son of his nearest relative Jalamsinhji of Sadodar. The child, on adoption, given the name Raisinhji. On his death, the next year, the Jam adopted Ranjitsinhji, the grandson of Jalamsinhji. In 1884, a son was born to one of the Muslim concubines of the Jam. The child was named Jaswantsinhji. Vibhaji now decided to adopt him as his heir in place of Ranjitsinhji. After getting the permission of Government of India in the matter he adopted Jaswantsinhji, and Ranjitsinhji was pensioned off.

Vibhaji after a long rule of 43 years, died in 1895.

18. Jaswantsinhji (1895-1906)—After Vibhaji's death Jaswantsinhji succeeded to the *gadi*. But he being a minor, Major W. P. Kennedy was appointed Administrator to rule the State and safeguard the interest of the young chief. The Rajkot-Jamnagar and Jamnagar-Bedi railway lines were declared open in 1897. From 1st July, 1902 the Jamnagar Municipality

ceased to be a department of the State and was made a self-supporting institution by giving it a few sources of revenue. To remove the evils of the *bhag-batai* or crop share system of assessment, the introduction of cash assessment was thought of. But, taking into consideration the insufficiency of time to watch so important a charge, and the condition of the peasantry which had broken down, the cash assessment of a village as a whole was decided on the basis of the yield of average years in the past. The total assessment was then spread over the various fields according to their quality, as decided by a *panch*.[1] This system of cash assessment was initially introduced in the Paddhari taluka of the State. Jaswantsinhji was installed on the *gadi* in 1903 on attaining majority. But he died childless in 1906 at the age of 24.

19. RANJITSINHJI (1907-1933)—After the death of Jaswantsinhji, Ranjitsinhji, who had been in obscurity for 12 years, registered his claim to the *gadi*. This was recognised, and he assumed kingship in 1907 Ranjitsinhji had first been educated in the Rajkumar College, Rajkot, and then in the Trinity College, Cambridge, where he won fame as an outstanding cricketer. A great batsman of his time he visited a number of foreign countries in many a cricket team and came to be known by the familiar name of 'Ranji'.

He compared the task of State administration with the playing of the game of cricket and all through his life carried the burden of administration with all the spirit of a sportsman. On assuming kingship he first turned his attention towards the modernisation of Jamnagar city, an unhygienic town with narrow streets. An all-rounded development of the city was undertaken. It was entirely remodelled. Old narrow streets were widened, and stately buildings erected. A high standard of cleanliness in the city was introduced and maintained. Some localities that could not receive air and light almost throughout the day in the past became fully lighted and ventilated. Clock towers were built and public gardens laid out. All these added much splendour to the picturesque city and it began to be known as the Paris of Saurashtra. In 1910, the construction of railway from Jamnagar to Dwarka was started, and completed against heavy odds. The scheme was jointly financed by the Nawanagar State and the Gaekwad. This rail link acted as a great incentive to the growth of trade and commerce in the region

He reorganised all the departments of the State. Up to 1916, he was carrying on the administration with the assistance of the Dewan. The Secretariat System was then promulgated with a view to secure efficiency, control and closer touch with the people. 4 Secretaries styled Revenue Secretary, Political Secretary, General Secretary and Huzur's Personal Assistant each in charge of certain departments were appointed. They

1. *Administration Report of the Nawanagar State*, p. 3, 1901-1902

exercised powers of Dewan with respect to departments under their charge, and referred all matters of importance to the Jam for orders.

In 1919, he constituted an Advisory Council consisting of 57 members, officials as well as non-officials representing various interests for consulting the wishes of the people and giving effect to them as far as possible. The Dewan of the State acted as the President of the Council. The Council was empowered to deliberate on all matters placed before it and the President of the Council submitted to the Ruler the result of its deliberations. The decisions of the Council were in the nature of recommendations and opinions, the adoption of which rested with the Jam Saheb. The institution of the Advisory Council despite its shortcomings and nominated character, marked the beginning of associating the people of Nawanagar State in matters administrative on the part of a Ruler who was a staunch believer in hereditary kingship.

Jam Ranjitsinhji was a member of the Committee of four Princes appointed prior to the introduction of Montagu-Chelmsford Reforms. He attended, as a delegate and representative of Princes, the meeting of the League of Nations in 1920. He was again invited to attend the sessions of the League in 1922 and 1923. He was a member of the Chamber of Princes in his own right, and took keen interest in its deliberations. He was elected Chancellor of this body in 1932. He attended the meetings of the Round Table Conferences in 1930 and 1931.

The Jam, from the time of his accession, took many important steps to improve the lot of the peasants. He encouraged well-irrigation by giving a subsidy of Rs. 125 for every well sunk by a farmer. Large sums of money were spent on constructing bunds and dams. The age old *bhag-batai* or crop-share systems was done away with and cash assessment introduced. The cultivators were granted full occupancy rights, viz., transfer, sale, inheritance, gift, adoption, etc. 'Veth' or forced labour in any forms was abolished. The Agriculturist's Relief Act was passed in 1916 and "Famine Relief Fund" organised as a measure of protection in the time of famines and other natural calamities. Experiments in agriculture were carried out and model farms in different districts and villages of the State started. A "Famine Insurance Fund" for the relief of non-agricultural population was also started. The State donated one lakh of rupees to the fund in 1919. The Jam, who was himself a highly educated and enlightened ruler, took great pains to promote the cause of education in his State. He made primary education free from 1911 and secondary education free from 1916. Scholarships were liberally awarded to students to enable them to continue their studies in arts and technical courses in India and abroad.

The Department of Commerce and Industries was created in 1918 to promote commerce and industries in the State. Development of industries

was accompanised by the development of ports, extension of railways, and liberal encouragement to businessmen, which contributed considerably to the material progress of the State. A sum of rupees 75 lakhs was spent in making Bedi a model port, and the foundation of a new hospital called the Irwin Hospital in Jamnagar was laid in 1927.

The various reforms introduced by the Jam turned the face of Nawanagar State and made it a modern and prosperous State. The brilliant career of the Jam came to an end when he died in 1933 at the age of 60.

20. DIGVIJAYSINGHJI (1933-1966)—As the late Jam Ranjitsinhji had no children, he left the *gadi* to his nephew Digvijaysinghji. He, like his uncle, was also a great ruler, endowed with great political acumen. He took much interest in the Chamber of Princes, and worked as its Chancellor between 1937-1944. Nawanagar State continued to flourish during his reign. On the eve of Independence in 1947, Nawanagar was one of the progressive and well administered States in Kathiawar. An important event of great political significance, viz., introduction of the Attachment Scheme which took place during his reign deserves notice.

THE ATTACHMENT SCHEME

Prior to 1947 the Western India States Agency of which this district formed part presented a conglomeration of as many as 222 states, big and small, each of them claiming special status, power and independence and exercising different degrees of jurisdiction. Jamnagar district as at present constituted is formed by the inclusion of salute states like Nawanagar and Dhrol as well as non-salute and smaller principalities exercising semi-jurisdictional powers. The economic resources of smaller states and estates were not sufficient to meet the cost of an independent administrative machinery. The Government of India, therefore, formulated under the Agency Notification No. 60 dated the 16th April, 1943 a scheme known as the Attachment Scheme whereunder certain smaller semi-jurisdictional states, talukas and estates of the Western India States Agency were tagged on to the adjoining bigger states for administrative purposes. As a result of this Notification, Khirasara State, Talukas like Jalia-Dewani, Kotharia, Gavridad, Pal, Vasavad, Lodhika (T. S. Mulwaji), Lodhika (T. S. Vijaysinhji), Gadhka, Anandpur (K. S. Hathia Desa), and Anandpur (K. S. Dada and Nana Jiva)[1] were attached to the Nawanagar State. Lodhika, Majmu Taluka and Virpur State which objected to this scheme were attached later during the year. The charge of all the units attached to the Nawanagar State was assumed by the State Special Officer. The Attachment Scheme had as its objective the pursuit of a uniform policy in the matter of administration in order to ensure to the attached units such

1. *Administration Report of the Nawanagar State*, pp. 6-7, 1943-44

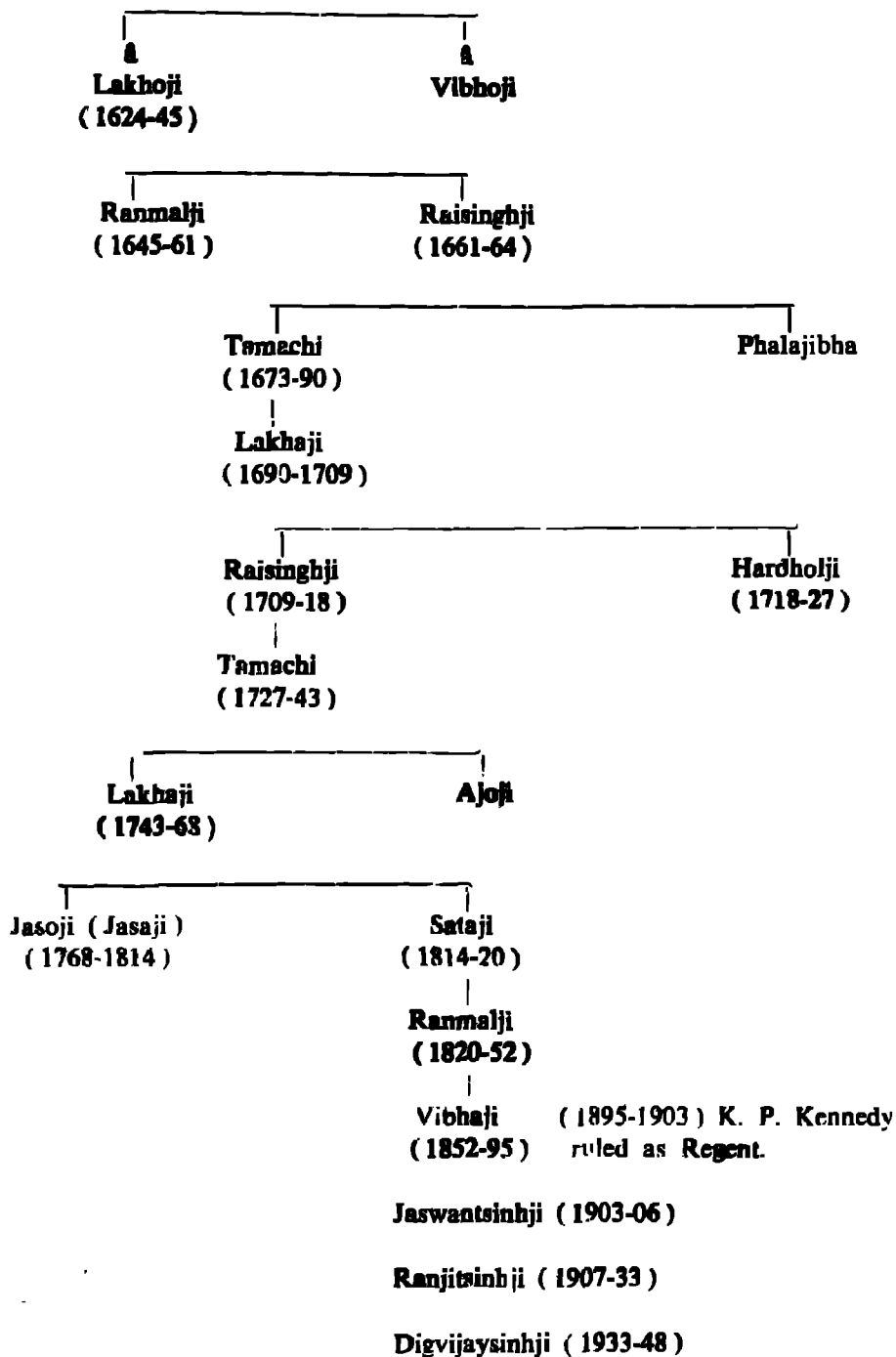
common benefits as education, medical relief, good roads, etc., which they could not afford owing to their limited resources.

The Attachment Scheme was not popular with some of the smaller states affected by it, as they saw in this measure a dimunition of their existing authority and power. This arrangement did not last long, and came to an end with the Independene of the country and withdrawal of the British Paramountcy which made some of the Princes believe that they were sovereign rulers in their rights. They did not, however, take long to be disillusioned when the scheme of integration of princely areas was implemented.

After Independence, Jam Shri Digvijaysinhji took an active part in the integration of Princely States. As pointed out by Shri V. P. Menon.[1] but for the enlightened lead given by Jam Saheb in signing the covenant, after persuading his senior and junior rulers of Kathiawar, the Saurashtra Union would never have been formed so soon, and speedily as it was. His most important contribution was the formation of the United State of Saurashtra in 1948, of which he was the *Raj Pramukh* till its merger into Bombay State. He attended as an Indian delegate the annual sessions of the General Assembly of the United Nations Organisation in 1948 and 1949. He donated one lakh rupees towards the reconstruction of the temple of Somnath at Prabhas. After the death of Digvijaysinhji in 1966 his son Shatrushalyasinhji succeeded.

1. MENON, V. P., *Integration of the Indian States*, pp. 190-198

2. The spellings of these names differ as given in the *Bombay Gazetteer* and *Yaduvamsa Prakasha* by Kavi Mavdanji.

THE GENEALOGY OF THE JAMS OF NAWANAGAR—*contd.*

OKHAMANDAL

The name of the region is usually derived from Okha, a daughter of *asura* Bana, and the beloved of Aniruddha the grandson of Shri Krishna. But it is possible the word is from Rksa, wild, coarse, bad. For the soil is sterile, and probably indicates the physical features of the land, and the barbarous character of the former inhabitants. The original inhabitants are said to be Kabas, Modas, and Kalas. The former are traditionally believed to have defeated and looted Arjuna after Krishna's death. The Kabas and Modas now seem to be extinct but the present day Vaghers are said to have descended from the Kabas.

The earliest conquerers of or immigrant to Okhamandal were the Yadavas under Krishna. The Kalas reconquered Okhamandal in the 2nd century A. D. Next a Syrian, Sukkur Belim conquered or possessed this region and during his time Dwarka was submerged by the sea. He was driven out by another Syrian named Mehem Guduka. The Kalas then reconquered the land and ruled peacefully until the 6th century A. D., when a brother of the Chavdas under Akherajji subdued the Kalas now known as Vaghers. He was succeeded by Bhuvad Rai and his son Jaya Sen who founded Chavadapadar near Mulvasar. Evidently these people seem to be the Sakas one of whose inscriptions is found at Mulvasar. The inscription was incorrectly read and cited in the *Kathiawar Gazetteer* (p. 589). It is of Saka Rudrasena (former Kanakapuri).

The Jain temple at Vasai alleged to be built by Kanaka Sen seems to have been built during the late Ksatrapa or early Maitraka rule. Vasai seems to be ancient Vasati or Vasahika (a Jain or Buddhist establishment). The Chavdas were accompanied by or followed by Heroles, who are supposed to have ruled at Dwarka, intermittently with the Chavdas with whom they were always at war. In about the 13th century came the Rathods who taking advantages of the Herole-Chavda quarrels, first exterminated the former, and then the latter. For these blood thirsty deeds they are said to have assumed the name 'Vadhel'—'the slayers'. The few surviving Chavdas and Heroles were absorbed by the Vaghers.

Veravalji, the Rathod now became the sole ruler of Okhamandal, the eastern limit of his fief being the Vedamati river, near the Rann. For some reasons he removed his capital from Dwarka to Aramda on the northern coast of Okhamandal. He reigned for several years and was succeeded by his son Vikamsi. During his tenure, his brother-in-law Hamirji a son of the Rana of Kutch established a fief at Vasai. The rulers of Aramda were called Ranas, possibly after the Ranakas (Ranas) of Ghumli-Porbandar.

The 10th Rana from Vikamsi ascending the *gadi* after about 120 years was the famous Sanganji. He extended the boundaries of his kingdom on the east to Khambhalia, and also along the coast on the south-east. The conquests were supplemented by piracy on the sea, and freebooting on land. His son Bhimji attacked even the Muslim pilgrims to Mecca. This enraged Mahmud Begada, the most powerful of the Gujarat sultans. He conquered Okhamandal, destroying the temples at Dwarka and Beyt, and garrisoning Aramda as well as Beyt with his troops. Later Bhimji's supremacy was questioned by Manaks, who claimed Dwarka, and internecine feuds followed. An alliance was, however, ultimately formed between the Vadhels and Vaghers, the chief terms of which were recognition by the Vaghers of the paramount authority in Okhamandal of the Vadhel, and a permanent agreement to unite their forces in resisting external aggression. This agreement was tested several times. First, when Shiva or Siv Rana, as a result of his offering asylum to Muzafar, the last Sultan of Gujarat, was killed in a battle against the Khan Azam's forces and Aramda was annexed. Later Samla Manak, the Raja of Dwarka, and his younger brother Malla Manak drove out Muslims from Aramda, and reinstated Sanganji at Aramda.

Marriage relations with Nawanagar were established, when the sister of the next Rana Akherji was given to the Jam. Inspite of this, when Vadhels of Aramda and Positra Vaghers of Dwarka began to harass Kathiawar, between 1715-18, then a combined force of Porbandar, Nawanagar and Gondal had to be sent into Okha to punish them and deprive them of their vast possessions.

Just about this time, the Vadhels and Vaghers were divided into branches, each with their capital at Aramda, Positra and Dwarka, Vasai respectively.

The history of Okhamandal up to 1800 seems to be uneventful, but since this date, until their final extermination or submission the Vadhels and Vaghers came up repeatedly against the British and Gaekwads. About the year 1804 the pirates captured a Bombay vessel sailing up the coast. Compensation was then demanded but the Vaghers in the plenitude of their arrogance and self sufficiency and aware also of the inaccessibility of their rocky and inhospitable coasts refused compliance. In 1807 Col. Walker was ordered to proceed to Okhamandal and exact reparation from the Vaghers for their misdeeds He reached Dwarka and after assembling the Vadhel and Vagher chiefs and appraising them of the object of his visit, imposed a fine of Rs 110,000 as compensation for their unprovoked attack on British subjects. The chiefs agreed to pay the fine in full and promised abstention in future from further excesses. The fine was not then levied. The Okha chiefs, however, recommenced their plundering expeditions. Captain Ballantine, the Assistant Resident at Amreli commanded

the chiefs to pay the fine imposed by Col. Walker, and the following year a third of the amount was realised from them. They still, however, continued their predatory excursions. Persuation and measures of coercion proving ineffective in checking their excesses, Col. East in 1816 reduced them to subjection, realized a part of the fine, and restored the district to the Gaekwads in 1817 who promised to pay the balance of the fine. Thus the Gaekwads became directly responsible for the peace and good government in Okhamandal. However, this peace was short-lived. The Vagher and Vadhel chiefs rebelled. In the ensuing conflict some were killed, others jailed, and released later on satisfactory security. However, between 1845-47 rebellions broke out at least twice because the Gaekwad administration was weak. The British deputed Lieut. Barton who brought about a temporary settlement between the parties. Soon after the Vaghers again rebelled, and took Dwarka and Beyt. The Gaekwad having failed sought British help, entrusting them with the administration of the district. This, however, was the period of the great Indian uprising. And taking advantage of the rumour that the British had left, the Vaghers, assumed independence and called themselves "Raja of Okhamandal". Ultimately Col. Donovan recovered these two holy towns from the Vaghers and restored order in the district by defeating and driving the Vaghers. With the exception of the chiefs of Positra and one or two others, others were deprived of their *jagirs*, and Lieut. Barton stationed at Dwarka, as the first British officer. Barton and his successor attempted in vain to raise a Vagher battalion, but the latter preferred agriculture to hard life of a soldier. Even after stationing a British officer at Dwarka, Mulu Manek and Deva Manek continued their deeds of outlawry. So Major Reynolds had once again to set out against them. Though he himself was severely wounded and two of his officers killed, the Vagher rebels were at last exterminated in 1868 and this was the last of the disturbances, and the Vaghers convinced by this time of the futility of further resistance, gradually submitted, and have given since then, but little cause for trouble and anxiety. Under the Gaekwad, Okhamandal formed part of Amreli district. However, on account of its importance, after the rendition of complete control over the Vaghers, it began to be treated as a separate district since 1920, and placed under a special officer styled the Commissioner. After Independence in 1947, the State of Baroda of which Okhamandal formed a part, merged in Bombay State in 1949. Okhamandal was then made part of Amreli district. But it was transferred to Jamnagar district in 1959 and made one of its talukas.

Dhrol State

The founder of Dhrol State was Jadeja Jam Hardholji, brother of Jam Raval (founder of Nawanagar State). Dhamal Chavda (Hardhamal Chavda) had been ruling over the territory called Dhamalpur (now called Dhrol) in 1539 A. D. He was defeated and killed in a battle by Hardholji.

who conquered 140 villages, and established his kingdom with capital at Dhrol, so named after his own name. Hardholji assisted his brother Jam Raval in the conquest of the territories of the Jethwas who were joined by the Valas, Vadhels, Kathis, and *Subah* of Junagadh, against the Jam. In the battle of Mithoi, Jam Raval was victorious over his enemies, but Hardholji was killed in 1550. Jasoji, his son, ascended the throne and ruled for 14 years. The descendants of Hardholji ruled in Dhrol till its merger in Saurashtra in 1948. Jasoji wanted to avenge his father's death. He fought with Bhan Jethwa at Kanjari and though Bhan Jethwa fought valiantly, he was killed in the battle. Jasoji's maternal uncle Raj Raisinhji of Halvad became estranged with his nephew, and attacked Dhrol. Jam Vibhoji of Nawanagar sided with Raj Raisinhji. In the ensuing battle, Jasoji was killed, and succeeded by Bamanioji. Though the country was then infested with the outlaws, Bamanioji ruled well. After a short reign of 2 years he died and was succeeded by Hardholji II, who ruled for 38 years. Hardholji II did not help Nawanagar troops against the Moghals in the famous battle of Bhuchar Mori fought in 1591 because of his differences with the Nawanagar ruler. But when the queen of Prince Ajaji came to Bhuchar Mori for becoming *sati* he made all arrangements for her. After the death of Hardholji II in 1604, he was succeeded by Modji, who ruled for 5 years, and was succeeded by Panchanji. Panchanji successfully warded off the inroads of the outlaws. After a long reign of 35 years he died in 1644. After him Kaloji I ruled for 12 years. He was a brave man. He fought a severe battle with the Kathis on the outskirts of Sartanpar Khokhri. The place is still remembered as Kaladhar from his name. When Azamkhan, the *Subah* of Gujarat, attacked Nawanagar to recover the arrears of tribute, which the then Jam Lakhaji had stopped paying, Kaloji sent his eldest son Sangoji with an army to assist him against the Moghals.

On the death of Kaloji his second son Bhimji refused to ascend the throne, and was consequently granted Khirasara along with 12 other villages. The third son of Kaloji, Junoji ascended the *gadi* of Dhrol in 1706. As a prince, prior to his coming to the throne he had played an active part in the installation of Raisinghji to the throne of Nawanagar. When the then reigning ruler of Nawanagar Ranmalji died, attempts were made by his widow and her brother Govardhan Ram to put on throne an infant son, whom she declared to have adopted. Junoji took the side of Ranmalji's brother Raisinhji, who ultimately succeeded. After the death of Junoji, he was succeeded by Khatoji, who ruled only for 3 years, and was succeeded by Kaloji II. But Kaloji was assassinated the next year, and was succeeded by his brother Vaghji, who ruled for 44 years. After his death in 1760, his son Jayasinhji I also called Dadaji came to the throne. He reconquered Khirasara in about 1760, as the ruler of Khirasara refused to restore Khajuri to Dhrol State on the death of the

mother of Bhimji and showed signs of independence. But after some time Jayasinhji restored Khirasara to Bhimji. Jayasinhji died after a reign of 21 years, and was succeeded by his son Junoji II, who died after a reign of 8 years and was succeeded by Nathoji. Nathoji was succeeded by Modji II. Modji helped the ruler of Nawanagar against the dominance of Meraman Khawas, and though he could not succeed in this, he made a reconciliation between the Jam and Meraman Khawas. Modji began to rule as an independent king. He died in 1803 after a reign of 21 years, and was succeeded by his son Bhupatsinghji, who ruled for 41 years. It was during his reign that the Dewan of the Gaekwad and the Resident of Baroda Col. Walker came to Halar district on behalf of the Gaekwad to fix the amount of tribute. The amount of tribute for Dhrol *parganah* was fixed at Rs. 5,346 and that for Sarpadad at Rs. 4,359. But Sarpadad was at that time mortgaged to Nawanagar State. Therefore, Bhupatsinghji asked the help of the British and the Gaekwad to get it back. The British and the Gaekwad asked the Jam to return the *giras*, who hesitated to do so. Thereupon the armies of the British under Col. Walker and of the Gaekwad under Fatehsingh Rao attacked Nawanagar. The Jam came to terms, and Bhupatsinghji got back Sarpadad in 1818. A severe famine (called the *Oganotra*) raged during his reign in 1813. Prices rose very high and several *bhayats* were obliged to mortgage their *giras*. After the death of Bhupatsinghji in 1844 Jaysinghji II came to the *gadi*. He ruled peacefully for 42 years. He initiated several public welfare measures. He constructed a fort and darbargadh each at Dhrol and Sarpadad. He built gardens, *dharmashalas*, roads, ponds, etc., for the benefit of the public. During the famine of 1878 he distributed foodgrains to the poor. He was famous in his times for his justice. He was a learned man and patronised scholars and writers. After his death his son Harisinghji ascended the *gadi* in 1886. Education by that time, had made such strides in the peninsula, that the British considered that the time had arrived when the more important States could be permitted to control their own educational arrangement.[1] Accordingly, the Education Department which was handed over to the State during his reign made good progress. Harisinghji helped the poor and the *bhayats* during the famines of 1900, 1901, 1902 and 1912. A telegraph office was also added to the post office. After his death in 1914 his son Daulatsinhji succeeded him. He was a member of the Chamber of Princes in his own right. After his death his grandson Chandrasinhji ascended the *gadi* in 1939. After independence in 1947, the State along with other princely States and estates in the peninsula merged into Saurashtra. Dhrol is now a taluka of Jamnagar district. The Ruler takes active part in politics and is an elected member of the Gujarat State Legislature.

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1. WILBERFORCE-BELL, H., *The History of Kathiawad From The Earliest Times*, p. 250, 1916

Jalia-Dewani

The State of Jalia-Dewani was an off-shoot of Dhrol State. Shri Bamanioji (1564-1566), the 3rd ruler of Dhrol, had given Jalia consisting of 10 villages to one of his sons Rawaji in *jivai*. Devoji, the 5th ruler in this line, was a very brave man, who had lost his right arm in war with the Ahirs of Morvi. But even then he continued to fight with his left hand and win battles. It was from his name that the taluka came to be known as Jalia-Dewani. When the forces of the East India Company and the Gaekwad entered Halar district, the then Jalia chief, Jasoji, accompanied them with the object of obtaining their assistance against the Jam, who was at war with him. The rulers of Jalia-Dewani were classed as *talukadars* and exercised jurisdiction of the Fifth Class. After Independence the principality along with other princely States and estates in the Kathiawar peninsula was merged in Saurashtra. Part of it was included in Halar District, renamed Jamnagar district after the transfer of Okhamandal from Amreli district in 1959.

Dhrafa

Dhrafa was an apanage of Nawanagar State. The *talukadars* of Dhrafa were cadets of Nawanagar. Dhrafa, (a *paraganah* of 12 villages) and Amran were given in *giras* by Jam Lakhaji I (1624-1645 A. D.) of Nawanagar State to his 3rd son Jasoji.[1] Jasoji and his successors ruled over Dhrafa which became the site of Agency *thanah* after Col. Walker's Settlement in Saurashtra. After Independence, it was merged in the United State of Saurashtra and included in Halar district.

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1. WATSON, J. W., *Statistical Account of Nawanagar being the Nawanagar Contribution to the Kathiawar Portion of the Bombay Gazetteer*. p. 24, 1879

APPENDIX I

List of archaeological sites, with their location and period in Jamnagar district

Sl. No.	Name of site	Nearest village	Taluka	Lat.	Long.	Period
1	2	3	4	5	6	7
1	Alia Bada ..	Alia Bada	Jamnagar	22° 27′	70° 13′	IIB & IIC
2	Bed ..	Bed	Jamnagar	22° 26′	69° 57′	IIC
3	Bhangol ..	Bhangol	Bhanvad	22° 0 5′	69° 52′	IIC & III
4	Binanagari ..	Balambha	Jodiya	23° 43′	70° 22′	IIC
5	Pithad ..	Pithad	Jodiya	22° 41′	70° 32′	IIB & IIC
6	Gop ..	Gop	Jamjodhpur	22° 01′	69° 56′	IIB & IIC
7	Hadiana ..	Hadiana	Jodiya	22° 36′	70° 15′	IIB
8	Jaidak ..	Rasnal	Jodiya	22° 40′	70° 35′	IIB & IIC
9	Kalyanpur ..	Kalyanpur	Kalyanpur	21° 50′	69° 25′	IIB & IIC
10	Kota ..	Kota	Khambhalia	22° 10′	69° 42′	Do
11	Moda ..	Moda	Jamnagar	22° 26′	70° 13′	Do
12	Narmana ..	Narmana	Jamjodhpur	22° 15′	70° 03′	IIB
13	Fala ..	Fala	Jamnagar	22° 31′	70° 18′	IIB
14	Sanalo ..	Jasapar	Kalavad	22° 12′	70° 25′	IIC & III
15	Virpar ..	Virpar	Jamnagar	22° 07′	70° 06′	Do
16	Vasai ..	Vasai	Jamnagar	22° 04′	70° 00′	IIC

Source :
Archaeological Survey of India, Baroda

APPENDIX II

List of archaeological sites with types of pottery discovered in Jamnagar district

Sl. No.	Sites		Nearest village	Taluka	Pottery: Harappan	Pottery: Late Harappan
1	2		3	4	5	6
1	Fala	..	Fala	Jamnagar	Harappan	..
2	Hadiana	..	Hadiana	"	"	R. P. W.
3	Sanalo	..	Jasapar	Kalavad	"	..
4	Kotada	..	Kalavad	"	"	..
5	Old Site	..	Bhayuna Khakharia	"	"	..
6	Moda	..	Moda	Jamnagar	"	..
7	Alia Bada	..	Alia Bada	"	"	R. P. W.
8	Narmana	..	Narmana	Jamjodhpur	"	..
9	Gadhia	..	"	"	"	..
10	Lakha Baval	..	Lakha Baval	Jamnagar	"	R. P. W.
11	Vasai	..	Vasai	"	"	"
12	Bed	..	Bed	"	"	"
13	Amra	..	Amra	"	"	"
14	Modpar	..	Modpar	Lalpur	"	..
15	Bhalgam	..	Bhalgam	Khambhalia	"	..
16	Ranparda	..	Ranparda	Kalyanpur	"	..
17	Mulpadar	..	Ranparda	"	"	..
18	Akhalia	..	Nagadia	"	"	..
19	Tankaria	..	Tankaria	"	"	R. P. W.
20	Vankiner	..	Chandravada	"	"	..
21	Damdama	..	Suryavadar	"	"	R. P. W.
22	Timli	..	Dudhia	"	..	"
23	Chandravada	..	Chandravada	"	..	"
24	Lalparada	..	Lalparada	Khambhalia	..	"
25	Khijagal	..	Hathla	Bhanvad	..	"

R. P. W.=Red Polished Ware

Source :

Department of Archaeology, Gujarat State, Ahmedabad

APPENDIX II—*contd.*

Sl. No.	Sites		Nearest village	Taluka	Pottery	
					Harappan	Late Harappan
1	2		3	4	5	6
26	Kutharivad	..	Machhaliwad	Kalavad	..	..
27	Talwadi	..	..	"	..	R. P. W.
28	Panéli	..	Dhundhorji	Kalavad	..	"
29	Suvarnatirtha	..	Varvala	Okhamandal	..	"
30	Virpar	..	Virpar	Jamnagar	Harappan	..
31	Gop	..	Moti-Gop	"	"	R. P. W.
32	Mori	..	Amra	"	"	—
33	Bhangol	..	Bhangol	Bhanvad	"	—
34	Kota	..	Kota	Khambhalia	"	R. P. W.
35	Khimrana	..	Khimrana	Jamnagar	..	"
36	Shekhpat	..	Shokhpat	"	..	"
37	Gangajale	..	Gangajala	"	..	"
38	Jambuda	..	Jambuda	"	..	"
39	Bharana	..	Bharana	Khambhalia	..	"
40	Nagari	..	Amran	Jodiya	..	"

CHAPTER III

PEOPLE

Population

Growth of Population—The population of the areas now comprising Jamnagar district was 352,150 in 1901. In 1961 it rose to 828,419 (rural-534,761, urban-293,658) recording a rise of 135.25 per cent during the last sixty years. There has been no significant rise in the population of the district between 1901 and 1921 due to plague and influenza epidemics which burst over the district in 1918-19 and wrought great havoc on the population. From 1921 onwards there has been a steady and progressive increase which rose as high as 34·29 per cent during the decennium 1951-61, higher than in all other districts of Gujarat of (except the Dangs) and much higher than the State average of 26·88 per cent and the all-India increase of 21·51 per cent. Comparatively greater increase in population in recent times may be attributed to the general improvement in medical and public health services available to the people since Independence as also to the decline in death rate. The decennial growth of population between 1901 and 1961 for the district is given in the statement that follows.

STATEMENT III.1

Variation in Population During, 1901-1961

Year		Population	Decade variation	Percentage decade variation
1		2	3	4
1901	..	352,150	..	..
1911	..	359,604	+ 7,454	+ 2.12
1921	..	359,631	+ 27	+ 0.01
1931	..	425,463	+ 65,832	+ 18·31
1941	..	517,833	+ 92,370	+ 21·71
1951	..	616,896	+ 99,063	+ 19·13
1961	..	828,419	+211,523	+ 34·29
1901 to 1961	..		+476,269	+135·25

Source :

District Census Handbook 1961, Jamnagar, p. 12

The density of population according to the 1961 Census thus comes to 80 persons per sq. km. (urban 1,560; rural 52), as against 112 for the State. The urban density is naturally much higher than the rural where the pressure of population is comparatively less. Moreover average density in rural areas is calculated on the basis of the entire area included within the limits of the revenue village and not on the basis of village site, as in the case of towns. Among talukas, density is the highest in Jamnagar taluka (207) due to the inclusion of the city of Jamnagar with the population of 148.572 persons, but it is the lowest in Lalpur (47).

The following statement gives details about rural/urban population (sexwise), density of population per sq. mile and sq. km. and the number of villages and towns by taluka.

STATEMENT

Houses and

Sl. No.	Taluka	Total/ Rural/ Urban	Population Per sq. mile	Population Per sq. km.	Number of villages Inhabited	Number of villages Uninhabited
1	2	3	4	5	6	7
	District Total ..	.. T	206	80	701	19
		R	185	52	701	19
		U	4,041	1,560	..	..
1	Jamnagar ..	.. T	537	207	99	2
		R	189	73	99	2
		U	14,491	5,595	..	..
2	Dhrol ..	.. T	162	63	41	..
		R	118	46	41	..
		U	7,525	2,905	..	..
3	Jodiya ..	.. T	179	69	52	1
		R	171	66	52	1
		U	261	101	..	..
4	Kalavad ..	.. T	151	58	101	2
		R	133	51	101	2
		U	12,123	4,681	..	..
5	Lalpur ..	.. T	122	47	73	2
		R	109	42	73	2
		U	3,623	1,399	..	..
6	Jamjodhpur ..	.. T	170	66	75	4
		R	141	54	75	4
		U	11,038	4,262	..	..
7	Okhamandal ..	.. T	223	86	41	1
		R	82	32	41	1
		U	4,558	1,760	..	..
8	Kalyanpur ..	.. R	125	48	69	1
9	Khambhalia ..	.. T	170	66	81	5
		R	111	43	81	5
		U	5,982	2,310	..	..
10	Bhanvad ..	.. T	204	79	69	1
		R	169	65	69	1
		U	1,051	406	..	..

Source :

Census of India 1961, Vol. V, Gujarat, Part II-A, *General Population Tables*, pp. 37-39

III.2

Population

Number of towns	Number of occupied residential houses	Population			Total/ Rural/ Urban	Taluka
		Persons	Males	Females		
8	9	10	11	12	3	2
15	**141,027**	**828,419**	**424,300**	**404,119**	**T**	**District Total**
..	**88,581**	**534,761**	**271,923**	**262,838**	**R**	
15	**52,446**	**293,658**	**152,377**	**141,281**	**U**	
3	44,735	255,970	133,026	122,944	T	1 Jamnagar
..	14,755	87,975	44,833	43,142	R	
3	29,980	167,995	88,193	79,802	U	
1	6,034	35,310	17,801	17,509	T	2 Dhrol
..	4,231	25,527	12,871	12,656	R	
1	1,803	9,783	4,930	4,853	U	
1	9,777	61,445	30,278	31,167	T	3 Jodiya
..	8,221	53,624	26,589	27,035	R	
1	1,556	7,821	3,689	4,132	U	
1	12,402	74,929	37,988	36,941	T	4 Kalavad
..	10,749	65,837	33,341	32,496	R	
1	1,653	9,092	4,647	4,445	U	
1	8,914	53,045	27,033	26,012	T	5 Lalpur
..	8,139	47,610	24,240	23,370	R	
1	775	5,435	2,793	2,642	U	
1	13,300	77,586	39,665	37,921	T	6 Jamjodhpur
..	10,834	63,788	32,594	31,194	R	
1	2,466	13,798	7,071	6,727	U	
4	11,305	60,595	31,625	28,970	T	7 Okhamandal
..	3,957	21,512	11,028	10,484	R	
4	7,348	39,083	20,597	18,486	U	
..	11,085	68,933	35,407	33,521	R	8 Kalyanpur
2	13,281	81,972	41,490	40,482	T	9 Khambhalia
..	8,698	53,140	26,962	26,178	R	
2	4,598	28,832	14,529	14,304	U	
1	10,244	58,634	29,987	28,647	T	10 Bhanvad
..	7,967	46,815	24,058	22,757	R	
1	2,277	11,819	5,929	5,890	U	

Rural/Urban Ratio—The rural/urban ratio is 64·55 to 35·45. The percentage of rural population to total population of the district has decreased from 74·97 per cent in 1901 to 64·55 per cent in 1961 as compared to a similar fall from 77·67 per cent to 74·23 per cent in the State, revealing a slightly faster trend of urbanisation in the district.

Rural Population—The total number of villages in the district is 720 of which 19 are uninhabited. The total rural population of the district is 534,761 giving an average of 763 persons per inhabited village, as against 824 in the State as a whole. Percentage distribution of rural population by size group of villages is given below.

Percentage Distributing of Rural Populaion by Size Group of Villages, 1961

Size group	Number of villages	Percentage to total number of villages	Rural population	Percentage to total rural population
1	2	3	4	5
Less than 200 ..	76	10.84	8,385	1.57
200—499 ..	216	30.81	75,090	14.04
500—999 ..	250	35.66	179,262	33.52
1,000—1,999 ..	122	17.41	165,136	30.88
2,000—4,999 ..	33	4.71	85,533	16.00
5,000—9,999 ..	4	0.57	21,355	3.99
10,000 and above ..	..	..	..	..

Source :

District Census Handbook 1961, Jamnagar, p. 13

As the statement indicates, of the 701 inhabited villages, 292 or 41·65 per cent fall in the class range less than 500 population ; 250 or 35·66 per cent in the class range 500 to 999 ; or 122 or 17·41 per cent in the class range 1,000 to 1,999 and only 37 or 5·28 per cent are large size villages of population 2,000 and above. The concentration of rural population in small or medium size villages is thus clearly discernible.

Urban Population—Statement III.3 that follows gives the number of towns classified by population.

STATEMENT III.3

Number of Towns Classified by Size Groups During, 1901 to 1961

Year	I: 100,000 and above — Number of towns	I: Population	II: 50,000 to 99,999 — Number of towns	II: Population	III: 20,000 to 49,999 — Number of towns	III: Population
1	2	3	4	5	6	7
1961 ..	1	148,572	..	..	1	20,064
1951 ..	1	104,419	..	..	..	..
1941 ..	..	..	1	71,588	..	..
1931 ..	..	..	1	55,056	..	..
1921 ..	..	..	..	..	1	42,495
1911 ..	..	..	..	..	1	44,887
1901 ..	..	..	1	53,844	..	..

Year	IV: 10,000 to 19,999 — Number of towns	IV: Population	V: 5,000 to 9,999 — Number of towns	V: Population	VI: Below 5,000 — Number of towns	VI: Population
1	8	9	10	11	12	13
1961 ..	5	62,329	7	59,307	1	3,396
1951 ..	1	15,194	9	74,155	5	21,347
1941 ..	2	23,066	6	46,391	2	8,700
1931 ..	1	10,913	5	34,309	1	3,860
1921 ..	..	..	4	28,929	1	3,968
1911 ..	..	..	4	28,979	1	3,658
1901 ..	..	..	4	29,698	1	4,615

Source :

District Census Handbook 1961, Jamnagar, p. 14

The number of towns has increased from 6 in 1901 to 15 in 1961. At the time of 1951 Census the number of towns was 16 which has come down to 15 in 1961 owing to declassification of a number of them as a result of change in the definition of urban areas. According to this definition, Dhrafa,

Balambha and Raval which were treated as urban in 1951 were declassified and treated as rural in 1961, whereas Sikka and Bedi have been treated as urban in 1961 for the first time. The urban population of the district, numbering 293,658 persons is spread over 15 towns of different sizes, of which only Jamnagar comes under class I and has population over 100,000. No town falls under class II, while there is only one town in class III, i. e., size group 20,000 to 49,999. The rest fall under classes IV, V and VI having population below 20,000. The average population of a town in the district is only 19,577 as compared to 30,380 for the State, though the proportion of urban population in the district is higher than that obtaining in the State.

Displaced Persons

As a result of the partition of the country in 1947 some Muslim families migrated to Pakistan, but a proportionately larger number from Pakistan was settled in the district. The total number of such migrants to the district according to the 1961 Census was 4,719 (2,429 males, 2,290 females) of whom 4,432 have settled in urban areas and 287 only in rural areas. As many as 3,982 of them have settled in the city of Jamnagar. Government has extended various facilities to rehabilitate them by giving them financial aid and other concessions including technical and vocational training, loans to settle in petty business or trade and special priority for recruitment in public services.

Sex-ratio

At the time of the 1961 Census the number of females per 1,000 males was 952, a little higher than the similar ratio of 940 for the State. The proportion of females was comparatively less in towns (927) than in villages (967). The urban areas with a sex-ratio lower than the district average comprised Sikka, Jamnagar, Bedi, Okha Port and Dwarka, due to the industrial and commercial development of these places leading to the concentration of male population in these areas. On the other hand, Jodiya and Salaya are the places which recorded more females (1,120 and 1,099 per 1,000 males) than males, mainly due to the absence of the male members who go out to sea as sailors and return home at long intervals.

Birth-place and Migration

The 1961 Census recorded that 172,014 persons, i. e., 20·76 per cent of the population were born elsewhere within the district, 8·46 per cent outside the district in the State and 2·89 per cent outside the State. The city of Jamnagar naturally attracts a greater number of people (53,252) from outside, as it is one of the important industrial and commercial centres of

Gujarat. As many as 20,560 have come from other parts of the district and settled in Jamnagar for bettering their economic condition. Sexwise distribution of migrants shows that 12·27 per cent of the male population and 29·68 per cent of the female population were born elsewhere but within the district and 6·10 per cent of the male and 10·94 per cent of the female population were born outside the district. A very high percentage of female migrants in these two categories is due to birth and marriage migrations brought about by the members of the female sex leaving their parental house after marriage where the first delivery also takes place. Migrants from Pakistan number 8,043.

Marital Status

According to 1961 Census 335,784 persons in the district were married, of whom 167,418 were males and 168,366 females. Persons who were not married accounted for 442,136 of the total population, males being 57·83 per cent and females 48·69 per cent of their respective population. The widowed were 5·88 per cent and divorced or separated 0·22 per cent only. The following statement gives the percentage distribution of males and females by age and marital status.

STATEMENT III.4

Percentage Distribution of Population by Age, Sex and Marital status

	Total		Never married		Married		Widowed, divorced or separated	
Age-group	Males	Females	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7	8	9
Total ..	100	100	57.83	48.69	39.46	41.66	2.71	9.65
0—9 ..	100	100	100.00	100.00	..	.	..	
10—14 ..	100	100	98.87	97.15	1.13	2.83	..	0.02
15—19 ..	100	100	85.25	47.85	14.54	51.66	0.21	0.49
20—24 ..	100	100	40.54	5.95	58.33	92.40	1.13	1.65
25—29 ..	100	100	12.09	1.38	86.24	95.98	1.67	2.64
30+ ..	100	100	2.72	0.46	88.89	69.13	8.39	30.41

Source :

District Census Handbook 1961, Jamnagar, p. 17

The statement given above reveals that child and infant marriages have very nearly disappeared in the district inasmuch as only 1·13 per cent males and 2·83 per cent females of 10-14 years are returned as married in 1961.

Among males, the age at marriage has shifted and risen to 20 years and above, as only 14·54 per cent of males in the age-group 15-19 were returned as married. In case of females, the marriageable age has gone well over 15 as disclosed by the fact that in 1961, 51·66 per cent of females in the age-group 15-19 and 92·40 per cent in the age-group 20-24 were married. While 30·41 per cent of females of more than 30 years were returned as widowed, divorced or separated, the similar percentage for males was 8·39 per cent only. This shows the general absence of remarriage among women.

LANGUAGE

Gujarati is the mother tongue of 95·48 per cent of the population of the district. The 1961 census recorded 791,014 persons as Gujarati speaking. Speakers of the other main languages included Kachchhi (16,213), Sindhi (5,064), Urdu (3,720), Hindi (3,702), Marathi (2,123), Tamil (1,206), Malayalam (970), Punjabi (911), Garhwali (628), Marwari (482), Bengali (463), Telugu (408), Kokna/Kokni/Kukna (299), English (222) and Kannada (210). The number of speakers of other languages is insignificant. The Gujarati script used universally by the speakers of that tongue is very much akin to Devnagari, but unlike Devnagari it is written without the line overhead. Kachchhi the next important language of the district is spoken slightly differently but written in Gujarati script.[1]

Bilingualism –The total number of persons speaking a language subsidiary to their mother tongue were 34,255 or 4·14 per cent, who have returned between themselves as many as 26 speeches as subsidiary languages. The most important among them are Hindi (18,098), English (9,575), Gujarati (5,484) and Urdu (333) followed by Sanskrit (238), Marathi (144), and Sindhi (80). Gujarati claims the highest number of bilingual speakers (23,715), for whom the general order of preference was Hindi, English and Urdu. For persons with Kachchhi, Urdu and Sindhi as their mother tongue, the most important subsidiary language was Gujarati.

Further, Gujarat, being the predominant mother tongue of the district, naturally claims the highest number also among its speakers as a subsidiary language, as it would obviously be the medium of communication with the local people by those whose mother tongue is non-Gujarati.

RELIGION AND CASTE

Religion—The district has a predominant Hindu population. The 1961 Census shows that as many as 697,169 or 84·16 per cent of the total population of the district were Hindu. Muslims numbered 101,234 (12·22 per cent),

1. For the origin and evolution of the Gujarati Languages please refer to the *Bhavnagar District Gazetteer*, (Ahmedabad), pp. 106-107, 1969.

Jains 27,707 (3·35 per cent), Christians 1,218, Sikhs 734 and Buddhists 159. Those following other religious persuasions numbered 135 or 0·02 per cent. There is no person professing tribal or animistic faith.

The following is the rural/urban distribution of population under various religions distributed by sex.

STATEMENT III.5

Distribution of Population, by Religion

Religion	Rural / Urban	Males	Females
Hindus	R	247,138	237,406
	U	111,815	101,110
Muslims	R	17,459	17,212
	U	32,890	33,673
Jains	R	7,316	8,216
	U	6,423	5,752
Christians	R	7	..
	U	870	404
Sikhs	R	3	4
	U	446	281
Buddhists	R	..	..
	U	157	2
Other religions and persuasions .	R	..	..
	U	76	59

Source :

District Census Handbook 1961, Jamnagar

Hinduism—Though the influence of caste is tending to diminish appreciably with the spread of modern education, the religious life of the orthodox Hindu is mainly governed by tradition and the particular sect to which he belongs. Brahmins are the followers of Shiva and almost all have household gods whose worship some members of the family must perform everyday. Brahmins are expected to perform *sandhya* (twilight prayer) at least once a day in the morning, and repeat *Gayatri* or Sun hymn. Banias are Vaishnavas, staunch adherents of Vallabhacharya who propounded the worship of Krishna by intense devotion or *bhakti*. Instead of the sacred thread, both men and women wear round their neck a *Kanthi* of small basil or *tulsi* (*ocimum-basilicum*) beads. The Rajputs, though partial to the worship of Shiva, are equally devoted to Shakti, the mother Goddess. The agricultural and artisan castes are all god-fearing people who worship some or the other deity of the Hindu pantheon Rama, Krishna, Mataji or Mother Goddess in her numerous forms, Hanuman, etc. Belief in sorcerers, witches, the evil eye and bad omens still prevails but is on the whole loosening.

Shaivism—The main doctrine of Shaivism is the existence of one universal soul without a second or *advaita* and of the individual soul or *jeevatma*. Adherents of Shaivism worship the deity under the name of Rudra, Shiva, Sadashiva, Shankara, Shambhu, Mahadeva, Neelkantha, etc., in their own houses, as also in the temples which are to be found in almost every village, town or city in the district. They use a transverse streak of three lines called *tripunda* on their forehead as religious mark and use *rudraksha* rosary. Shiva worship has continued from the earliest times to be the cult of the Brahmins, though this deity is the equal favourite of all other castes except the Vaishnavas and the Jains. Towards the close of the eighth century, Shiva worship was extended and popularised by Adya Shankaracharya. He established in India four *mathas*[1] or monasteries where he appointed his four principal disciples as *acharyas* who are in their turn succeeded by their pupils to this day. Shaivas in this region generally come under the jurisdiction of Shardapith (Seat of Learning) situated in Dwarka at the western end of the district. The first head of this monastery was Mandanmishra, the famed pundit whom Shankar had defeated in philosophical debate and who had taken *sanyasta* under the name Sureshwaracharya. The present Shankaracharya, Shri Abhinav Sadchidanand Tirth, is the 77th in the line. The Shankaracharya of Dwarka wields great influence over the Hindus in all parts of western India. He goes about from place to place within his jurisdiction preaching and disseminating the doctrine of the Vedic religion. His is the last word in all religious matters affecting the followers of Shaivism in Gujarat.

Vaishnavism—Vishnu, Sun God in the Rigveda, becomes the God of preservation and universal prosperity in the post-Vedic period. The various incarnations or *avatars* of Vishnu literally mean his descent to earth for the good of gods and men. Of these, Rama the seventh incarnation and Krishna the eighth are the most popular. Among Rama worshippers the chief are Ramanujis, Ramanandis and Ramasnehis, though he is worshipped as well by the followers of other creeds. Vaishnavism prevalent in this part of the country is the *pushti marg* or creed of spiritual nourishment founded by Vishnu Swami and propagated by Vallabhacharya. The philosophic doctrine it propounds is termed *shuddhaadvaita* as distinguished from the *kevaladvaita* of Shankaracharya and *vishistadvaita* of Ramanuj. It teaches that God, though eternal, is endowed with celestial form and all visible phenomena emanate from him. Building on this philosophical basis, Vallabhacharya introduced elements of pleasure and enjoyment in divine worship, rejecting the austerity and hardship of the other sects. Such epicurean principles began to assume unseemly forms which caused

1. These four *mathas* are : (1) Badri Kedar in the extreme north, (2) Rameshvar at the extreme south, (3) Jagannathpuri in Orissa and (4) Dwarka in Saurashtra.

comments and criticism from various quarters and led to the appearance of such reformist sects as Swaminarayan founded early in the 19th century by Sahajanand Swami (1781-1829) which has a large following all over Gujarat.

Pranami Sect—The Pranami or Parnami sect which is an offshoot from Vaishnavism has followers among Rajputs, Banias, Suthars, Darjis, Kolis, etc. It is said to have been founded during the 17th century in Bundelkhand by one Shri Prannath. Another story is that its founder was Devchand Maharaj of Amarkot in Sindh, who was much devoted to the study of the Bhagvat-Purana. He travelled to Jamnagar where he consecrated a temple to Radha-Krishna in 1631.[1] Devchand's chief disciple was one Meheraj Thakore, after whom the sect is also called Meheraj Panth. One of the tenets of this sect is that no idol or image should be worshipped but only Meheraj's Book of Faith. In spite of this, Pranamis adore the boy Krishna as he was at Gokul during his juvenile sports, and also worship the Book of Faith in their temples. The Pranami *gurus* observe celibacy, visit their followers, receive presents, and give readings or recite *kirtans* in the temples. The number of Pranami temples in the district is five including the one at Jamnagar.

Jainism—Jainism preaches tapa or austerity. Control of the mind and passions *ahimsa* and renunciation of all wordly pleasures and attachments to attain *moksha* or liberation. Jains worship the images of all the 24 *tirthankars* in their temples wherein are also found images of Hindu gods and goddesses in some side niches, at times under different names.

The two major divisions of the Jains are Shwetambar and Digambar. Shwetambar monks put on white clothes and Digambar monks having directions as their clothes wear no clothes. The major point of difference between the two is whether the injunction to renounce all wordly possessions for achieving salvation should be carried to the extreme by dispensing even with clothes and practising nudity.

Islam—The chief articles of Islamic faith are belief in the unity of God: in His Angles; in His books; in His prophets; in His government of the world; in good and evil as coming from Him; and in the day of Resurrection. Muslims in the district constitute a little over six per cent of the total population according to the Census of 1961. Among the two leading sects of Islam found in the district, Sunni and Shiah, the former are more common than the latter. The group of Shiahs known as Ismailis whose Imam or religious head is His Highness the Aga Khan is also found among the Khoja community in the district.

1. CAMPBELL, JAMES, M., *Bombay Gazetteer*, Vol. IX, Part I, *Gujarat Population, Hindus*, p. 545. 1901.

CASTES

The *Statistical Account of Nawanagar* published in 1879 refers to the existence of the following castes and the occupations practised by them.

> "The principal aboriginal tribes are the Mers, Waghers, Mianas, Ahers, and Kolis; there are also Wadhel, Wala, Chudasama, Sodha, Jadeja and Waghela Rajputs, and Kathis of the Khachar and Wala tribes. There are also Aboti and Gugli Brahmans, the latter are the officiating priests of the temple of Dwarka. There are also Tumbel Charans said to be sprung from a former chief of Kachh by a Charan concubine.........Tailors, ironsmiths, potters and dyers in this State frequently become carpenters, and potters and Kanbis occupy themselves as mansons. The principal trading classes are the Wania, Brahman, Lohana, Bhatia, Mehman, Khoja, and Vohora. There are no Kharwas in Nawanagar territory, and the sailors are almost invariably either Waghers or Mianas. The most intellectual classes in the Nawanagar State are those of the Wania and Nagar Brahman, but the Nagars are not so powerful here as in Bhavnagar or Junagadh. Salt is manufactured by a Muhammadan tribe of potters called Majothis. Muhammadans, as a rule, are oil-pressers, grocers, carpet weavers, bookbinders, small retail dealers, weavers, cutlers, and sipahis".

The main castes obtaining at present are (1) Kanbi (2) Ahir (3) Bania (4) Brahmin (5) Rajput (6) Lohana (7) Kumbhar (8) Bharwad, etc., among Hindus and (1) Memon and (2) Khoja among Muslims in order. Bania, Lohana and Bhatia among Hindus are the principal trading classes. Brahmins are chiefly employed in public services or are performing priestly duties. Rajputs to a large extent are land-owners and engaged in cultivation of their own land. Kanbis form the main agricultural class in the district. Kolis are either agriculturists or labourers. Ahirs, Bharwads and Rabaris are cattle-breeders or herdsmen. Besides these, there are the artisan castes like *lohar, suthar, darji, soni, kumbhar, valand* and *mochi* who carry on their hereditary occupations in every village.

Among the Backward Classes, Bharwad, Charan and Rabari living in the *neses* of the forest areas of Alech and Barda Hills are notified as Scheduled Tribes in the district, whereas Mers and Vaghers are included under Denotified Tribes. Kolis and Ahirs are included in the list of other Backward Classes for the purposes of recruitment to Government services.

Scheduled Castes--The population of Scheduled Castes in the district according to the 1961 census is 50,295 (25,057 males and 25,238 females) forming 6·7 per cent of the total population of the district. The rural/urban

distribution accounts for 35,171 persons (69·93 per cent) in villages as against 15,124 (30·07 per cent) in towns. Details by caste are given below.

STATEMENT III.6

Scheduled Castes Distributed into Rural and Urban Areas, 1961

Scheduled caste	Total	Males	Females	Percentage to total population of the district		Percentage of each Scheduled Caste population	
				Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8
Total ..	**50,295**	**25,057**	**25,238**	**4.24**	**1.83**	**69.93**	**30.07**
Bawa (Dhed) or Dhed-Sadhu	445	211	234	0.03	0.02	57.75	42.25
Bhangi or Rukhi ..	3,618	1,732	1,886	0.09	0.35	20.70	79.30
Chamar, Nalia or Rohit	8,402	4,262	4,140	0.74	0.27	72.83	27.17
Dangashia	35	25	10	..	0.01	..	100 00
Garmatang .. .	540	279	261	0.05	0.02	79.44	20.56
Garoda	896	457	439	0.07	0.04	67.30	32.70
Meghwal	25,589	12,652	12,937	2.30	0.79	74.37	25.63
Senva	103	49	54	0.01	..	100 00	..
Turi . ..	16	4	12	..	..	100.00	..
Turi Barot or Dhed Barot	99	62	37	0.01	..	96.97	3.03
Vankar, Dhed or Antyaj	9,648	4,876	4,772	0.86	0.30	73.60	26.40
Unclassified	904	448	456	0.08	0.03	73.78	26.22

Source :

District Census Handbook 1961, Jamnagar, p. 20

The predominant Scheduled Caste in the district is Meghwal having 25,589 persons or 50·89 per cent of Scheduled Caste population of the district, 74·37 per cent of whom live in villages and 25·63 per cent in towns. Other castes which are numerically important in the district are Vankar, Dhed or Antyaj (9,648), Chamar, Nalia or Rohit (8,402) and Bhangi or Rukhi (3,618).

Scheduled Tribes—There is very little tribal or Adivasi population in Jamnagar district. For, Scheduled Tribes claim 3,410 or only 0·41 per cent of the total population of the district and 0·12 per cent of the Scheduled Tribes of State. Scheduled Tribes found in the district are Rabari, Siddi, Charan and Bharwad.

Rabaris—Rabaris forming the main Scheduled Tribe in the district number 2,406 or 70·56 per cent of the tribal population of the district. Their population comprises 1,220 males and 1,186 females. Rabaris living in the forest areas of Gir, Barda and Alech are notified as Scheduled Tribe under the Constitution (Scheduled Tribe) Order, 1950 amended from time to time. Cattle-breeding is their main occupation. In forest areas, they live in nes or temporary hutments which are shifted from one place to another, according to the availability of grazing facilities. According to one story,

they were originally Rajputs, who instead of marrying Rajput women, married elsewhere, but as they did not marry Rajput wives they were called *Rahabaharis*, that is goers out of the beaten path. Their original home is said to be the North-West Provinces from which they moved to Rajasthan and from there to Gujarat. This story is supported by the fact that the chief seat of Sikotra, their tribal goddess is at Jodhpur in Rajasthan. Rabaris in Saurashtra have six divisions which can eat together but do not intermarry. Their principal subdivisions are (1) Bhopa (2) Vinoya and (3) Sorathiya. Of these, the first two are mainly concentrated in this district. The Bhopas reside in the Barda area, while the Vinoyas are found along the coast of river Venu. Some of the Sorathiya Rabaris also have their habitat in Barda area of this district.

Both men and women Rabaris are strong, tall and well built with high features, large eyes and oval faces. The men wear moustache and flowing whiskers divided by a narrow parting down the chin. The beard is, as a rule, worn thick and short though a few shave the cheek and chin. They live by themselves in small huts with mud walls and tiled roofs. Some of them take flesh though not regularly. The men's dress does not differ much from that of poor cultivators, except that they put on instead of trousers a thick waist cloth tucked through the legs and sometimes have a black blanket over their shoulders. They never go out without a big staff. A woman's dress consists of a petticoat locally called *jimi*, a long sleeved bodice reaching to the waist, and a piece of cloth or a black woollen blanket (*dhabali*) thrown over the head. The *dhabali* hangs loose from the head, and is generally dark or maroon in colour with lighter spots and blotches caused by knotting. The *jimi* is tied in front a little to one side. It is generally of cotton, red or white in colour. The women's ornaments are silver or zinc anklets, ivory or wooden bracelets, silver armlets worn near the elbow, a silver necklace, silver or zinc earrings, and a nose ring. Both men and women are fond of tattooing their bodies, the men their arms and the women their cheeks, chin and arms. Rabaris rear cows, buffaloes, goats and sheep. With their droves of cows and buffaloes they move about the country in search of pasture. They make their living chiefly from the sale of milk, *ghee* and the wool of sheep.

Hindus by religion, the important characteristic of the tribe is their fanatic devotion to Goddess *Jog Maya* or Mother Goddess or Goddess of Power. The Rabaris implicitly believe in the omnipotence of this deity, and *bhuva*, the high priest of the deity, has an overwhelming influence on the affairs of the community as interpreter of the wishes of the goddess. Their principal religious functions are (1) *madh*, (2) *kalash* and (3) *chelan*. The *madh* ceremony which is the most popular takes place at one of the six accepted centres of the community after the high priest seeks and obtains the permission of the goddess

according to the prescribed rites. It is said that the goddess through the priest indicates both the time and the centre for its celebration. A large number of Rabaris attends it. The ceremony entails huge expenditure after feasting by way of *prasad* to the goddess, which is shared by all according to their mite.

The goddess which the Rabaris worship is also known as *Mungai*, i. e., the dumb goddess so called from the *chhandas* chanted in her praise. The *chhandas* called *sariyu* are mere blending of intonations and entirely wordless, and the meaning thereof is not understood by any one except those who might have initiated them. The tribe has almost an implicit faith in the powers of the goddess and seek her protection and help in times of distress or illness.

In birth, marriage, death, etc., they follow Hindus customs. Widows are allowed to remarry and in most cases the younger brother of her deceased husband is preferred.

Other tribes notified as scheduled are Siddi (570), Charan (222) and Bharwad (212). Of these, Siddi is the only Scheduled Tribe which lives both in urban (411) and rural areas (159) of the district. Being capable of hard work Siddis were employed as servants in the royal court of former Muslim States. Because of their contact with ruling families and the court nobility they have imbibed civilised mode of living and culture. While the Siddis are concentrated at Bedi and Jamnagar, the other three tribes are found mostly in the forest areas of the district. They are mainly engaged in live-stock breeding. The literate and educated among Scheduled Tribes number 148 or 4·34 per cent, of whom 71 are returned from rural areas and 77 from urban areas.

Other Backward Classes—Other backward classes besides Scheduled Castes and Tribes important in the district are Vagher, Koli (Chunvalia), Sathwara, Bhoi, Ahir and Vaghari.

Vaghers—The earliest inhabitants of Okhamandal were the Kabas, the Modas, and the Kalas who, it is said, have also been alluded to in Greek History written two thousand years ago. The Kabas were famed in the days of Shri Krishna as the savage inhabitants of Saurashtra but their race is now extinct. The Modas also have disappeared. But the traces of the Kalas are still to be found and it is from this tribe that the Vaghers of the present day are said to have descended. Various legends about their origin associate them with Shri Krishna and support their claim to be the earliest settlers of Okhamandal in this district. The existence of Kaba tribe can well be traced to the time of Shri Krishna from the following legend. " In a peevish moment the Gopi milkmaids

left Krishna and went to the pond now called Gopitalav near Aramda. Arjun was sent to make peace and persuade the Gopis to return. The delicate nature of the errand made Arjun vain, whereupon, to humble Arjun, Krishna created four males from the sweat of his body, who robbed Arjun and the milkmaids of all their belongings. The progeny of these four men is called Kala or Kaba."[1] The well-known Gujarati saying 'काबे अर्जुन लूंटियो' still popular all over Gujarat refers to this incident.

Referring to another legend the *Kathiawar Gazetteer* published in 1894, states as under :

"The legend of the origin of the Vaghers dates from the time when the god Krishna sported in the sacred waters of the Gomti at Dwarka. Here he was annoyed by the demon Kashasur, and here mounted on his eagle he overcame the demon and plunged him in the bowels of the earth. From the hole thus made issued the first Vagher, and they trace their bad qualities to their unfortunate origin. Whatever may have been their origin the Vaghers have undoubtedly inhabited Okhamandal for many centuries, first as fishermen, then as pirates, and then as landholders. In the eleventh century the district of Okhamandal was divided between the Herol and Chavda Rajputs, and a feud having arisen between these races, they were treacherously slaughtered by some Rathods whom both sides had called to their aid. The Herols sought an asylum among the Vaghers and were received into their tribe. Some time afterwards Hamirji, a Vadhel prince of the house of Cutch, came over to Okhamandal, and fell in love with a girl of the Herols, who was being brought up amongst the Vaghers. He married her, and their descendants, though classed as Vaghers, took the title of Maniks, and ultimately became rulers of Dwarka and south Okhamandal. From Okhamandal the Vaghers have spread along the south coast of the Gulf of Cutch, and are now found in most of the sea coast villages and towns of Halar engaged as fishermen or sailors."

Yet another legend about the origin of Vaghers States :

"The original significance of the word Vagher is from the Sanscrit *va*, a prefix meaning without, and geha, smell. The epithet was primarily applied to the tiger, because it had been deprived by a merciful providence of the sense of smell, in order to counteract a taste that had been developed by the animal, for scenting out and devouring human inhabitants of cities and towns. In process of time

1. Campbell, James, M., *Bombay Gazetteer*, Vol. IX, Part I, *Gujarat Population, Hindus*, pp. 522-523, 1901

the term was applied to the remnants of the Kala tribe in Okhamandal, who equally cruel and sanguinary with the tiger, used to prey upon defenceless mortals, as relentlessly as their predaceous prototype. Another fantastic legend says that once upon a time, one of the gods from the heaven or *svarga*, on paying a visit to Okhamandal, found it so unbearably hot whilst surrounded by the inhabitants that he demanded to be fanned by exclaiming 'Vagher', *va* meaning wind, and *gher* the imperative form of the word *gherna*. When he had been duly cooled down again to his ordinary temperature, he became so pleased and gratified with the devoted attention of the inhabitants, that he bestowed upon them the appellation of Vagher, by which name they have been distinguished ever since."[1]

Vaghers are partly Hindus and partly Muslims. Referring to their habits, customs, professions, etc., the volume on '*Gujarat Population*' of the *Bombay Gazetteer* published in 1900 says :

"As a class Vaghers, whether Hindu or Musalman are a fine-looking race, strong, hardy and enterprising, and capable of enduring fatigue. Like Rajputs, Rabaris, and Charans, the Vaghers part the beard in the middle curling the ends behind the ears. Their women also are well built and hardworking, but unlike Rajput women, they seek outdoor work and help their husbands in cutting mangrove or cher bushes for fuel, and in catching fish. The mothertongue of all Vaghers is a corrupt form of Jadeji or Cutchi dialect. Out-door they speak mixed Gujarati excepting Hindu Vaghers a few whom can talk Gujarati. Reading or writing is unknown among Mahomedan Vaghers, but some of the Hindus have studied Sanskrit, and are well read in the Hindu Shastras. As a class Vaghers are dirty in habits, ignorant and superstitious, and wanting in self-respect. By nature they are restless, turbulent, impatient of control and still have predatory leadings, especially the Vaghers of Okhamandal who rose against constituted authority four times between A. D. 1816 and 1873, since when they have settled down. By occupation Vaghers were at first fishers, then pirates and freebooters, and are now (A. D. 1900) landholders, fishermen, and especially the Musalmans, hardy long-voyage sailors to Calcutta, Ceylon, Karachi, Madras, the Malabar Coast, Maskat, the Persian Gulf and Zanzibar, also to South-east African ports. They go in their own vessels commanded by Vagher captains or *nakhudas*. The Okhamandal Vaghers still hold their *giras* lands, but the soil is poor, and from A. D. 1860 they pay a tax of one rupee a family to His Highness the Gaekwar. By religion the Musalman

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1. WATSON, JOHN, W., *Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar*, p. 587, 1884.

converts are Sunnis. The Hindus hold Ranchhodji or Dwarkadhish, lord of Dwarka, in great venerations, styling him their great grandfather. All Vaghers come to Dwarka on the Bhim Agiaras holiday, the eleventh of the bright half of the Jeth (May-June), when they bathe in the Gomti and worship Ranchhodji. The family bards or Barots of the Vaghers are Ravals living at Bara near Salaya. They do not eat food cooked by Musalman Vaghers. Hindu Vaghers gladly give their daughters in marriage to Musalman Vaghers who can pay for them."

The Vaghers were for long notorious as turbulent and rebellious pirates. Referring to their piracy and outlawry the *Kathiawar Gazetteer* states : "About the year 1804 the pirates captured a Bombay vessel sailing to the coast, and threw the crew and passengers overboard, amongst whom were, it is said, an Englishman and his wife. The Bombay Government despatched a war vessel to inflict summary punishment for this outrage." But the mission proved a failure and the Commander returned to Bombay without accomplishing his object. The Vaghers were thus a terror of the Arabian Sea doing as much damage as they could to peaceful traders and passengers. As their excesses were too great to pass unpunished, Okhamandal was captured by a British force in 1816. It was handed over to the Gaekwar, but the Vaghers quickly rebelled, drove out the Gaekwar's force, and re-established themselves in power. They were again subdued by a British force in 1820. But the local authorities were "unable to cope with the wild restless spirits" that formed the bulk of the population. They were in a chronic state of revolt, and did exactly as they pleased. In 1857, they drove out the Gaekwar garrison. Characterised by a strong spirit of independence, the Vaghers under the leadership of Mulu Manek were the only persons in Saurashtra to revolt against the British during the Mutiny of 1857. Dwarka was again taken by a British force, and, for some time, the district was administered by British officers. It was once more handed over to the Gaekwar, whose authority they again thwarted. Thus the Vaghers revolted against the Gaekwar several times from 1818 to 1873 till they were ultimately brought to order by the British forces in 1920.

The Vaghers who so far paid no land revenue to any authority were deprived of their *giras* and required to pay *salami* at a nominal rate of only one rupee per *santi* (48 *bighas*) of land. The land held by them was granted to them on condition of good behaviour and was liable to be resumed on their indulging in unlawful activities. The purpose behind this move was to settle them permanently in the cultivation of land. Even this concession did not reconcile the Vaghers who carried on strong agitation against the collection of land revenue. The special concession offered to Vaghers continued till 1954 when it was abolished under the Bombay (Okhamandal *Salami* Tenure) Abolition Act of 1953, whereunder they were made ordinary occupants of the land held by them.

The Vaghers are found in Okhamandal and most of the coastal villages and towns of Jamnagar district. While the Hindu Vaghers are mainly inhabitants of Okhamandal taluka, the Muslim Vaghers are scattered in Sikka, Salaya, Hariyana and Jamnagar. The Hindu Vagher surnames are Bhated, Kher, Manek, Sumaniya, etc. The Muslim Vaghers have such surnames as Sanghar, Kangada, Meyani, Chachan, etc. They are mostly engaged in agriculture and animal husbandry or employed as labourers in factories. A few of them, especially those on coastal areas, are fishermen.

Chunvaliya Kolis—Chunvaliyas take their name from 'Chunval' a tract in North Gujarat so called from its originally containing *chumalis* or 44 villages. They have 21 principal subdivisions, and they intermarry among their own class alone, but not among members of the same subdivisions. In the past Chunvaliya Kolis were a body of organised robbers. For years, they have settled as cultivators and labourers. They generally take vegetarian diet though some also take non-vegetarian food.

Sathvaras—Sathvaras, found all over Saurashtra, are also known as Dalvadis in some parts of Jamnagar district. Their surnames Chawda, Parmar, Rathod, etc., seem to show their Rajput origin. In appearance they are like Kanbis. Though scattered in many parts of Gujarat they intermarry among those settled in the same region or tract. Younger brother marry the elder brother's widow. Divorce is not uncommon. They are mainly engaged as husbandmen, field labourers or vegetable vendors. Their women are particularly clever in the art of glass embroidery. Sathvaras settled in Jamkhambhalia are economically better off as compared to others.

Bhois—Bhois claim to have Rajput origin. They have nine subdivisions. Intermarriages are permitted among only two of these subdivisions. In appearance they resemble Kolis. Backward economically and socially, they generally live in very small houses and hutments. Besides coarse grain they eat fish and flesh of goats. They are mostly engaged as field labourers or fishermen. Some of them also tend sheep and goats and sell grass or fuel.

Ahirs—Ahirs, Abhirs or cow herds of ancient Hindu writings are found in many parts of this district. Though now depressed and of little consequence, they were once a powerful class. They claim Lord Krishna's birth place Mathura as their first seat, from where they are stated to have come with Krishna to Saurashtra and thence to other parts of Gujarat. Some of their surnames are the same as those of Rajputs. They celebrate their marriages every year on the fixed day. As a class they are poor, generally living in small houses with a good herd of cattle, and having no furniture beyond cots, earthen jars and utensils. They are mainly engaged in agriculture and animal husbandry.

Vaghris—Vaghris claim to have derived their name from *Vagh* (tiger) *ari* (enemy), as they are originally said to have lived a life of hunters, killing tigers and other animals. They are said to have originated from Rajputs though they have now degenerated to a very low social position. Vaghris allow widow marriage as also divorce. If woman tires of her husband she tears the end of her skirt and presents it to him. She can then take another husband who has to give a caste dinner by way of penalty. They work as labourers, grow water-melons in river-beds and prepare and sell *datan* or *baval* tooth sticks.

SOCIAL LIFE

Social Customs : Hindu

Important customs observed by all Hindus are those relating to *simanta* (pregnancy), *upanayana* (thread-girding), *vivaha* (marriage) and *svargarohana* (death or heaven-climbing).

Simanta which corresponds to the Vedic *samskara* of *simantonayana* is popularly known as *agharani* or *kholo bharvo* (lap filling) and is performed at the husband's house to celebrate the woman's first pregnancy. This ceremony is not as elaborately observed these days as in the past. After the *simanta* ceremony the expectant mother generally goes to her parent's house for her first confinement. On the birth of a child the midwife cuts its navel cord and buries it in a corner of the compound in front of the house. On the night of the sixth day after birth, the *chhatthi pujan* is performed, when Vidhata or the Goddess of Destiny writes the child's future. Generally on the twelfth, but sometimes on some other suitable day, the child's naming ceremony takes place. On some auspicious day, usually in the third month of the birth, the mother returns to her husband's house with clothes, ornaments and a cradle presented to her and the grand-child by her parents.

The *upanayana* or *janoi* (sacred thread ceremony) as it is called in Gujarati is a *vedic samskara* involving various acts one of which is investing the *batuk* (boy) with a *yajnopavita* or *janoi* (sacred thread). For the *dwijas* (twice-born) *upanayana* is an essential *samskara* (purificatory rite) which formally initiates one to *brahmacharyashrama* or the stage of studenthood. Besides Brahmins, Lohanas and Bhatias also consider themselves by tradition entitled to the performance of these rites.

MARRIAGE AND MORALS

Hindu *shastras* consider marriage as a *samskara* or a sacrament which calls for the performance of elaborate rites and ceremonies prescribed in

the *gruhyasutras*, to enable a person to enter *grahasthashrama* or the householder's stage.

Marriage Ceremonies—The marriage ceremonies are elaborate. Two to three days before the day of wedding the *mandap muhurta* (erection of the marriage booth) and the worship of Ganapati and *gotraj* (family deity) take place at both the houses. On the day of marriage or on the day previous, bride's maternal uncle and his wife bring presents (*mosalu*) for the bride and her mother. Presents to the bride consist of *panetar* her wedding dress and ornaments especially *chudo* made of ivory to be worn at the time of the wedding. Similarly the bridegroom also receives presents from his maternal uncle.

The marriage usually takes place at the bride's place. The *jan* or the bridal party starts in procession with a musical band or drummers and pipers in front with the bridegroom and women singing in the rear. If the bride belongs to another place, the further journey to the bride's village or town is completed by any convenient mode of transport. On their arrival at the destination, they are received ceremoniously by the parents of the bride accompanied by their male relations. The party is then carried in procession to the place known as *utara*, specially reserved for their stay. Before the wedding procession starts, women of the bride's party go to the *utara* with *kalvo* consisting of sweets.

The wedding procession is usually a very grand affair. The bridegroom who is called *var raja* receives all the attention as if he were a king for the time being. He rides a horse richly caparisoned or sits in a horse carriage or motor car. When the procession reaches the bride's place, bride's mother waves a miniature plough, a grinding pestle and a churning stick, four times over the head of the bridegroom and places at the bridegroom's feet a *samput* made of two earthen cups or *kodia* painted white and tied together with a red string so that their edges touch each other. The bridegroom treads on the *samput* and breaks it to pieces and entering to booth takes his seat in the *mayaru* or booth specially decorated for the occasion.

The marriage rites and ceremonies to be performed at the *vivaha* or wedding are generally the same among all Hindus, though they may very in some minor details according to caste and region. The rites commonly in vogue are in order *kanyadana*, *vivaha homa*, *panigrahana*, *lajjahoma* and *saptapadi*. These are interspersed by a number of minor ceremonies such as feet washing, honey sipping, rice throwing, moment naming, present making, oath taking, etc. Brahmins and Nagars perform the *charubhaksanu* or *charubhaksa* ceremony (eating of cooked rice) when the couple sit in the booth called *chori* and the priest lighting the sacred

fire performs a sacrifice. The couple then feed each other with *kansar*. The bridegroom's people are then presented with cash and cloth by the bride's father. These presents are customary even among castes which do not perform *charubhaksana*. The communities which practised dowry had to pay to the bridegroom a very heavy price by way of *pehramani* (dowry).

In former times when child-marriage was prevalent, the bride did not accompany the bridegroom on his return home. This is not the case now except perhaps in case of Shrimali Brahmins who never bring the bride along with the *jan*. Some near relatives of the bridegroom stay behind to bring her later on any convenient day. The bridal couple is received ceremonially at the house steps. They then together offer worship to the *matrkas*, *gotraj*, *rannadev* or any other nuptial deities that were installed in the household at the commencement of the marriage festivity. The bride and bridegroom then untie the *mindhal* (randia-dumetorium) from each other's wrist, feed each other with *kansar* and play with *kodis* (shell money). With a *vadhamana* or thanks giving at the temple of the village deity, the marriage ceremony comes to a close.

The Hindu *shastras* ordain that a person should not marry in his own *gotra* and within six degrees of relationship on the father's side and four or five on the mother's side. Only Brahmins, as they know their *gotras*, can abide by the rule of *gotra* exogamy. Usually the *gotra* of the father alone and not that of the mother is considered when a marriage alliance is contemplated. Even this restriction has been showing signs of relaxation in recent times.

Moreover, a Hindu is supposed to marry within the same caste or sub-caste as a general rule. Any marrige outside is considered contrary to the caste custom. These restrictions are gradually loosening and marriages outside the caste and sub-caste are on the increase particularly among the advanced and educated classes.

The Hindu scriptures enjoin that the bride be given as a gift to a suitable bridegroom. This is called *kanyadana*. In course of time it came to be associated with the giving of a dowry which caused acute hardship to the poor. In response to a strong agitation against the continuance of this social evil, an Act abolishing the giving or taking of dowry at the time of marriage was passed by the Indian Parliament in 1960, and any contravention of this law was made penal.

Recent Trends—The social outlook of the people on marriage has considerably changed in recent times with the spread of education assisted by social legislation and economic stress. A number of undesirable social practices which were strictly observed in the past are freely departed from

under the changed circumstances and in the atmosphere of freedom and independence which have set people thinking on fresh lines. The practice of child marriages which was commonly prevalent in former times has well nigh disappeared and the age of marriage has substantially advanced both in case of males and females. In the case of males the age has gone beyond 20 and in the case of females beyond 15. Child marriage has been declared unlawful by a Central Law. Most of the restrictions which were accepted as a matter of course and scrupulously observed in the past are being modified and relaxed to suit the modern trends of thought and ways of living. Civil marriages which were unknown in the past are nowadays on the increase. Inter-caste marriages have also started taking place among the younger generations especially in towns. Bigamy is prohibited by law and made penal. Widowhood is still considered a mark of social superiority and universally practised by the advanced classes. Though divorce is now permitted under the law and freely practised by some of the lower castes which permit them by tradition and custom, its extent among the higher castes is comparatively much less and resorted to only under special circumstances. Even in cases where divorce is obtained by having recourse to a court of law as provided under the Hindu Marriage Act of 1955, the divorcee who remarries is generally the male member and not the female who prefers to remain single. Remarriages are, however, common among the lower castes where the custom known as *natra* is prevalent. Widow remarriage in the form of *diyarvatu*, that is to say levirate is permitted and practised among some of the lower castes, among whom a widow of an elder brother marries the younger brother of the deceased husband irrespective if the difference in their ages.

The following statement gives details about never married, married, widowed and divorced persons in the district according to 1961 Census.

STATEMENT III.7

Marital Status

	Total		Rural		Urban	
	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7
Total population ..	**424,800**	**404,119**	**271,923**	**262,838**	**152,877**	**141,281**
Never married ..	245,891	196,745	154,567	127,742	90,824	69,003
Married ..	167,418	168,366	109,219	111,837	58,199	56,529
Widowed ..	10,690	37,997	7,596	22,776	3,094	15,221
Divorced or separated	800	1,009	540	481	260	528
Status unspecified ..	1	2	1	2	..	..

Source :

District Census Handbook 1961, Jamnagar, p. 106

Death Ceremonies—Hindus consider it necessary to perform certain after-death ceremonies to propitiate the dead. Memorial rites or *shradha* are performed from the tenth and continued till the thirteenth day after death. On the twelfth day is performed what is called *sapindi karana* whereby the dead severs all earthly connections and joins the *pitrakas* (manes). On the thirteenth day of the *shradha*, various utility articles in use by the departed soul are gifted to the family priest, so that the deceased may enjoy them in another world. During the first year, *masio* (monthly), *chhamasi* (half yearly) and *varsi* (yearly) *shradhas* are also performed.

Social Customs : Muslim

The chief Muslim rites and ceremonies relating to pregnancy and birth, initiation, and marriage are described below as followed by Muslims in general and Sunnis in particular.

The first pregnancy ceremony performed in the seventh or ninth month takes place at the husband's house. Thereafter the expectant mother goes to her father's. On the seventh, fourteenth or twenty-first day after child birth comes the purely Muslim rite of *akika* sacrifice which has two parts, namely, the shaving of child's head and the killing of one or two goats.

Bismillah ceremony which consists of taking the name of God, is performed when a child completes four years, four months and four days. The child is made to repeat, after the priest, the opening chapter of the Quran and the relatives are feasted to commemorate the occasion. The *khatna* (circumcision) takes place when the boy is six or seven years old. There is rejoicing and a dinner in honour of a boy or girl keeping his or her first Ramzan fast.

Muslim Marriage—In general, a Muslim marriage lasts for two to three days. On the day of marriage, the bridegroom's relatives go to the bride's house in a procession called *bari* or *sachak* carrying in trays gifts of sweetmeats, dried fruits, ornaments and articles of dress for the bride. The party comes back with their trays refilled with clothes for the bridegroom. Some time during the early hours of night the groom dresses himself in wedding clothes and with a *sehra* (flower sheet) fastened round his forehead rides on a horse, and starts in a procession accompanied by friends and relatives with a musical band in front. At the bride's house the bridegroom is led to his seat. Then the *kazi* asks the bride's agent whether he accepts so and so as her husband in consideration of *meher* (dower) as decided. If she assents he takes the declaration of two other witnesses. He then puts the same question to the bridegroom. The proceedings are recorded by the *kazi* who offers his blessings to the married couple. The *nikah* or wedding ceremony is followed by an entertainment programme after which the bridegroom returns home with the bride.

Marriage, between cousins, both parallel and cross, is not prohibited among Muslims, that with the first cousin being preferred. However, sister's daughter is under incest taboo. A Muslim cannot marry his foster-mother or foster-sister, unless the foster-brother and sister were nursed by the same woman at intervals widely separated. Polygamy is restricted to four wives, but is not very common these days. A man may not marry his wife's sister during his wife's lifetime unless she has been divorced. Widow remarriage is practised but avoided by many as a mark of social superiority. A widow can marry her deceased husband's brother or relative and a widower his deceased wife's sister or relative. *Talaq* (divorce) as recognised by Muslim law is at the option of the husband, but among higher classes is resorted to only as the last resort.

SOCIAL EVILS—The district is free from such social evils as drinking, prostitution, etc., thanks to the enforcement of laws prohibiting them. Sporadic cases of drinking, however, do occur most of which are brought to book. The evil of gambling exists on a very small scale but is mostly confined to urban areas.

INTER-CASTE RELATIONS—As in other parts of the country inter-caste relations were very rigid a generation ago. The members of different castes and sub-castes lived in close watertight compartments in such matters as inter-dining and inter-caste marriages. The picture has greatly changed especially after Independence and the changes that have occured in recent times are noteworthy. Caste barriers in matters of food have almost broken. Inter-dining is no longer looked upon with disapproval by Hindu anywhere in the district particularly in towns, though this restriction still persists in a diluted form in rural areas. Inter-caste marriages, though not very common, are more frequent than ever before and many of the traditional restrictions on marriage based on caste are gradually melting away as a result of the spread of education, influence of western culture, equality of sexes and consequent removal of disabilities from which they suffered in the past.

PROPERTY AND INHERITANCE—As regards inheritance and succession, Hindus are governed by Hindu Law and the Muslims by Mohammadan Law. The system of Hindu Law which is followed in Gujarat is *Mitakshara* in general and *Vyavhar Mayukha* in particular. The main principle of inheritance is that the property of a Hindu is never held in abeyance, but devolves on the sons on the death of the father. Under the coparcenary law in force in Gujarat, the son acquires a right in the ancestral property as soon as he is conceived. But the self-acquired property can be disposed of by a person as he wills, as the son does not get any inherent right in such property. The disabilities in respect of inheritance and succession from which women suffered in the past have been removed by the legislature by enacting special

laws like Hindu Women's Right to Property Act, 1937, the Hindu Marriage Act, 1936, and the Hindu Succession Act, 1956 which have introduced fundamental changes in the status of women in line with the Directive Principles of the Constitution.

The Hindu Marriage Act enforces monogamy and renders bigamy penal. The Hindu Succession Act while breaking violently with the past lays down uniform system of inheritance and provides for equal treatment of male and female. Another distinguishing feature of these enactments is that any property held by a female Hindu is her absolute property over which she has full powers of disposal. The former restraints and limitations have been removed by making her a full owner and not a limited heir as in the past. Male and female heirs are treated equal without any distinction. When a Hindu male dies intestate his property devolves in equal shares between his son, daughter, widow and mother. In actual practice, however, this legal provisions do not appear to be fully implemented. The rights of women have thus been fully recognised at law by ensuring equality of rights in all fields of human activity, social, economic and political, first by granting adult sufferage and later by passing social enactments guaranteeing equality of status before the law.

JOINT FAMILY— The Hindu family is from ancient times joint in food, worship and estate. It consists of the head of the family, his wife, their sons married and unmarried, unmarried daughters and grand children living and working together. It was the responsibility of the head of the family to marry the younger members at the proper time, offer oblations to the dead, and propitiate titulary deities. The joint income of the family was spent after all the members according to individual need. The widowed, the orphaned, the aged and the disabled were duly looked after. With the passage of time the bonds of joint family system have begun to loosen and the desire for individual liberty has necessiated a change in the concept of the family as an economic unit. The need of getting higher and specialised education has separated the younger members from their family for studying at high schools and colleges which are located in towns and cities. On the completion of their studies, many of them have settled there and established separate households, as villages offer no prospects of their employment in profitable pursuits. With the spread of industrialisation and the increasing pressure of population on land, the village people have moved to large industrial and urban centres to earn a comfortable living. A large number of joint families has thus begun to disintegrate and the old social order characterised by the joint family system has been undermined under the stress of modern economic conditions and ways of life. The individualistic tendencies are gaining ground day by day, and the former ties which bound the family together are gradually disintegrating. Younger members of the family prefer to live separate rather than continue joint

and are naturally anxious about their own needs and comforts in preference to those of other members of the family. Despite these changes, the joint family system still survives though in a diluted form without the former adhesion brought about by the spirit of sacrifice and regard for common welfare.

PLACE OF WOMEN IN SOCIETY—Women occupied a high position in Hindu society since the ancient times. Lord Manu had declared that gods reside in those households where women are respected. (यत्र नार्यस्तु पूज्यन्ते रमन्ते तत्र देवता:). The husband who cast off his innocent wife was punished by the king. The wife, likewise, was supposed to worship her husband as God (पति देवो भव।) and to remain faithful to him. The status of women, however, declined after the Mohammadan invasions of India, when seclusion or *pardah* came into vogue as a measure of safety and protection. The practice continued thereafter particularly among Rajput chiefs, and Zamindars as a mark of social prestige.. Their womenfolk remained confined to the four walls of their home. The seclusion was stricter in villages than in towns, and greater among Muslims than among Hindus. But things have changed much in modern times, and the former seclusion of women has well-nigh disappeared.

During the second half of the present century, the desire for a rise in the level of living and soaring prices have created problems unknown in the past. Generally and for the most part, it is men, who are economically active, though in rural areas among the cultivating classes women have been giving a helping hand to their male partners in rearing cattle, looking after crops and assisting them in agricultural operations. It was only in towns that women were completely dependent and did not take part in any economic activity. Economic stress and worries of modern life have made it difficult for the people in urban areas to make both ends meet, if a certain standard of living is to be maintained. Educated women are coming out in increasing numbers to shoulder the responsibility of running the household by engaging themselves in gainful pursuits. Women of the labouring classes have always taken an active part along with males by getting themselves employed in mills and factories and other occupations involving manual labour. The participation of women in economic activity which was totally absent among the middle and higher classes in the past is increasing day by day to meet the economic challenge thrown out by the modern way of living. This tendency is gaining greater ground since Independence because of the equality of opportunities guaranteed to both the sexes under the Constitution of the country.

HOME LIFE

Housing—The total number of houses in Jamnagar district was according to 1961 Census 232,797, of which 145,859 or 62·65 per cent

were used as dwellings or shop and workshop-*cum*-dwellings, 25,950 or 11·15 per cent were vacant and the rest 60,988 or 26·20 per cent were used for non-residential purposes. Of the total, 64·45 per cent of the houses were in rural areas and 35·55 per cent in urban areas. Taking the district as a whole, on an average out of every thousand census houses 111 were vacant as against 889 which were occupied. The district average was exceeded by the taluka of Khambhalia, Okhamandal, Dhrol, Kalyanpur and Lalpur where the proportion of vacant houses was 199, 166, 145, 134, and 115 respectively. In all other talukas the proportion was less than the district average, the smallest being 45 in Kalavad taluka. Houses remain vacant for a variety of reasons, the principal amongst them being the desire of the house-owners not to give them on hire during their absence so that when they come back, they can live there during such brief vacations.

According to the 1961 census, the number of households was 144,396 as compared to dwelling houses which numbered 145,859. 70·75 per cent of the households lived in owned houses and the rest in rented premises. As is to be expected the proportion of owned houses was comparatively less in towns than in villages. While in urban areas 42·62 per cent of the households lived in their own houses in rural areas this percentage was as high as 87·24.

Housing facilities in the district appear to be on the whole inadequate. 20 per cent sample housing census conducted during 1961 disclosed that as many as 59·62 per cent of the total sample households in the district lived in single room houses, 28·41 per cent in houses with two rooms and less than 12 per cent in houses with more than two rooms. The extent of overcrowding can be measured from the fact that the number of persons who shared single room houses came to 5·14 on an average.

Rural Housing--The use of stone in wall materials is quite significant in rural areas of the district due to the existence of stone quarries which make this type of material easily and cheaply available for the construction of village houses. According to the census of 1961, as many as 78·14 per cent of houses in rural areas of the district were built of stone as against 15·9 per cent in the State as a whole. 5·61 per cent had mud walls; 5·24 per cent walls built with unburnt bricks and 9·59 per cent with burnt bricks. As regards roofing material 92·62 per cent of the dwellings had tiled roofs and 3·40 per cent had roofs of grass, leaves, reeds and bamboos and the rest had stone slabs or iron or cement sheets. The roofs were mostly covered with *deshi* or country tiles though the preference for *vilayati* or Mangalore tiles brought by sea is nowadays apparent in many villages. The flooring in a majority of village houses was a beaten earth covered with cow-dung emulsion which is believed to possess certain antiseptic properties, stone and cement tiles being in demand in houses of the well-to-do.

Urban Housing—In urban areas too, stone is the principal material in use in the construction of walls. 71·42 per cent of the urban houses had stone walls; 15·87 per cent had walls built with burnt bricks and 2·86 per cent had unburnt bricks. In Jamnagar city, 24·96 per cent of the dwellings were built of burnt bricks, 65·32 per cent of stone and only 4·71 per cent of mud. The use of tiles as roofing material was found to be comparatively much less in urban areas than in villages as the former structures also have terraces and *pucca* flooring as roof which is usually not found in the countryside. 65·21 per cent of the dwellings in urban areas had tiled roofs; 21·48 per cent had concrete or stone slabs; 10·47 per cent had corrugated iron or cement sheets and only 1·77 per cent had reeds, grass, leaves and bamboos as roof materials.

Statement III·8 Census houses and the uses to which they are put, Statement III·9 Distribution of sample households living in census houses used wholly or partly as dwelling by predominant material of wall and predominant material of roof (Based on 20 per cent Sample). Statement III·10 Sample households classified by number of members and by number of rooms occupied (Based on 20 per cent Sample) extracted from the Housing Tables published in Census of India 1961, Vol. V, Part IV-B, *Housing and Establishments Tables* are reproduced at the end of this Chapter.

LAYOUT OF TOWNS AND VILLAGES

The general layout of large size villages and towns in this district appears to be essentially the same, particularly with regard to the functional distribution of castes and workers. As in the case of villages, towns, some of which have developed from large-sized villages or happen to be the headquarters of a taluka are either on the bank of some river or located on some elevated ground. In towns the main roads passing across the central area branch off into sub-roads leading to residential areas distributed according to the functional characteristics of castes. Towns and large size villages which were in the past principality or seat of some estate holder had their *darbargadh* either in the centre or on one side of the village around which the various castes are distributed in the order of their social superiority.

Every village has localities earmarked for different castes. In a good number of villages there is a central place known as *chowk* with a public place called *chora* housing the temple of Rama which serves as a meeting place for elderly people. Close to the village gate and often outside it is what is commonly known as Harijanvas where the Scheduled Caste people stay in their mud-walled hutments. Next to it are the dwellings of other Backward Classes like Vaghri, etc. The houses of the so called higher classes are generally situated in the centre of the village followed by those

of artisan and service classes. The integrated layout of the houses also varies according to castes. The house of a Girasdar or the village yeoman for example, usually has a huge gateway or *delo* on either side of which is *bethak* or meeting place separated from the main house by an open courtyard. Provision for separate apartments for males and females usually exists in such houses, as women of the household do not appear in public. The houses of traders or artisans are usually shop-*cum*-dwellings or workshop-*cum*-dwellings. A Brahmin's house is usually provided with a separate kitchen and water-room with a corner reserved for worshipping the household deity. The houses of the Backward Classes are mostly single room tenements with a verandah in front. With the increasing efforts now made by Government to improve living conditions of the Backward Classes and Scheduled Tribes and Castes their newly constructed houses are much better planned and provided with greater comforts.

A major part of the houses in villages in this district is found to be one room tenements with a *parsal* or *osari* in the front. Dwelling with more than one room are mostly found to be occupied by higher and well-to-do classes. Most of the houses have an open courtyard in front or at the back enclosed by a wall where the agriculturists keep their cattle and the village artisans ply their household industry. Separate rooms for storing, living or sleeping are unknown in such dwellings, though separate kitchens are not altogether absent. Ventilation and sanitation facilities are meagre. In the past ventilation was not found indispensable to villagers whose economic activity kept them busy outdoors or in fields. Nor was its provision possible in their short sized dwellings. To them the prime use of housing was safety and protection of their scanty belongings and cattle against adverse climatic conditions, wild animals and thieves. But the new structures that are now built do possess adequate ventilation facilities. Air and light are appreciated to a far greater extent than in the past as evidenced by the opening of more windows or widening of the ventilators in the wall. Mud walls are being replaced by burnt bricks and country tiles by Manglore tiles. The desire on the part of the village people for a better and descent living is evidenced by new structures which are more airy and spacious. The trend thus indicates significant changes in living conditions which are far better than in the past due to the improvement of economic condition in the countryside.

FOOD, DRESS AND ORNAMENTS

Food—Hindus in this district, as in other district of Gujarat, as mostly vegetarian. High caste Hindus generally take two meals a day, but those doing physical work including labourers in urban areas and agriculturists, field workers and village artisans in rural areas take three meals a day—the breakfast or *shiraman* in the morning, then the full meal or *rondho* at noon and *valu* at night.

The food taken by most of the people in rural area is very simple consisting of two or three items per meal. It is mostly confined to *rotla* (or loaf) of *jowar* or *bajri*, and *chhas* (butter milk) which is the most popular and common item of meals coupled at times with some vegetable or pulse. Rice and *dal* do not find a place in their daily meals not only because most of them cannot afford them but also because they do not need or relish them daily. Only on some special occassions do they have rice, curry, vegetable, or some sweet. Otherwise it is the butter milk which serves the purpose along with *rotla* or *khichadi* which is also a popular item of food generally taken in the evening by all classes of people both in rural as well as in urban areas. The morning meal of an ordinary urbanite usually consists of *rotli*, rice, *dal* or curry and vegetable or *kathol* or pulse. The well-to-do have such ancillary items as *kachumbar* (salad), *chutneys*, *murabbas*, various types of pickles and one or more additional vegetables. The evening meals are comparatively simple susually consisting of *bhakhari*, milk and a vegetable. The use of *dal* and *bhat* is generally dispensed with in evening meals, though a few among the well-to-do repeat it also at night. During the last sixty years the use of tea has been universal among all classes of people, who take them twice a day, morning and afternoon.

Dress—The commonest type of dress worn by males in rural areas consists of cotton drawers called (*chorno*) and a short *kadiyu* or *angarakhu* covering the upper part of the body. Most of the people especially agriculturists still continue to put on the typical head dress, a thickly folded *phento* or turban. Before the appearance of Mahatma Gandhi on the political arena, the turban was the only headwear and the way one folded his turban was an indication in many cases of the caste of the wearer. The *Halari* type of turban, very popular in the past, is still in vogue though white Gandhi cap made of khaddar is the commonest mode of headwear both in villages and towns. Women in villages put on coloured petticoat (*chaniyo*) often embroidered with *abhala* or glass pieces, a similarly embroidered blouse or bodice (*choli* or *polku*) along with *odhani*, a coloured piece of coarse cloth covering the body and the head. Elderly males of higher classes put on *dhoti* (waist cloth) and *kafani* or *paheran* (shirt) while the younger folk have taken to trousers or pyjamas with shirts or bush-shirts.

As far as urban areas are concerned there is no remarkable difference in the dress put on by the people in this district from those in other parts of the State. The traditional type of dress consisting of *angarkhu* (coat), *jamo* (long robe or vest), *dupatto* or *khes* (shoulder-cloth) are no longer in general use by the urbanites. The women folk generally put on *sari* along with blouse and petticoat. The youngsters have commonly accepted shirts or bush-shirts. Curiously enough, head dress of any kind has gone

almost completely out of fashion among the younger as well as most of the older people, who go about bare-headed. Turban is replaced by white khadi cap as a general headwear. Women wear cotton *saris* or *sallas* of finer variety, petty-coats and blouse in preference to the older type of bodice which has been now given up. Girls do not put on *odhani* as before but have taken to frocks and skirts. The *chappal* has become a favourite footwear for men, women and children.

The transformation that has thus taken place especially during the last two to three decades in men's dress is to a great extent due initially to the acute shortage of cloth caused by World War II, which necessitated all possible economy in the use of cloth by all strata of society, high or low. Continuous rise in prices operated as a further check even when stocks were ample. Another important factor which has influenced the dress of the people not only in this district but throughout the country is the starting of the Swadeshi movement by Gandhiji who stressed simplicity in dress and use of khaddar by all strata of society. In the result even the more sophisticated classes of society discarded costly foreign cloth and readily resorted to simpler clothing made of Khadi, which had become an emblem of nationalism.

Ornaments—Ornaments are used both by males and females since ancient times to adorn different parts of the body. Used mainly for emphasising one's outward appearance, ornaments change from time to time according to the prevailing fashions and also differ from community to community. The change is effected not only in their style or design by also in their size, weight and contents. While the ornaments used in the past were generally simple, solid and heavy, those in vouge at present are much lighter, refined and sophisticated in designs. In the past ornaments used to serve the purpose of economic safety and insurance in times of stress and difficulty. Now with the spread of modern banking and other facilities, the stress is more on ornamentation and refinement than on solidity.

In the past there were certain ornaments which were commonly used by both males and females. These included *kanthi* worn round the neck, a silver *kandora* worn round the waist and a *vinti* (ring) worn on one or more of the fingers. With the passage of time men in general have ceased using these ornaments except the ring, which is now the only common ornament for males and females both in rural and urban areas.

Female Ornaments—Ornaments in regular use by women in rural areas are either of silver or alloy or of ivory though gold ornaments are on less popular with those who can afford them. Women in rural areas generally put on heavy silver ornaments. These include *dhabukla, dokiyu, kantha, ramnami* or *madaliyu* worn round the neck, *kada, chudla* or *khadak* of silver or ivory

plated with gold or silver worn on the wrists and *todla, sankala* or *kadla* on the anklets. Instead of light ear-rings women in rural areas put on heavy *tholiya* or *latkaniya* or *loliya* on ears. The nose ring known as *nath* or *chunk* used by them is bigger in size and heavy as compared with those used by women in urban areas. Women belonging to Rabari and other backward castes put on heavy ivory *kada* or *chuda* covering the entire forearms. *Soniyo* or *abhrami* made of gold is a popular ornament worn round the neck. They also put on heavy silver rings called *vedh* on fingers of both the feet.

Fashions in women's ornaments in urban areas have been changing rapidly. A general tendency appears to avoid heavy ornaments in preference to finer and lighter ones. Jewellery is worn by those who can afford it. In general, women in the urban areas adorn their ears with attractive ear-rings or *butti* made of gold or pearls or precious stones set in gold. Round their neck they put on a gold necklace or a chain with a pendant attached at the middle or a *mangal sutra,* if married. Thick golden necklace known as *hansdi* is put on special occassions. *Nath* or *chunk* in the nose is also used by many. Bangles of gold and glass are the most common ornaments for women. Gold rings of simple design or set with precious or immitation stones are also popular. Many young women use golden hair-pins to fix their hair. Silver *zanzar* or *sankala* worn on the anklets are used by many. A wrist watch is a recent addition and is gradually becoming popular among the younger generation.

Male Ornaments—The males in rural areas, particularly agriculturists, adorn their ears with *kundal, tholiya, phool* or *bhungari* made of gold or silver and a gold or silver ring or two on their fingers. They also use a silver chain of buttons on their upper garments. Those belonging to Bharvad, Rabari and other castes usually put on *kanthi* or *dokiyu* made of coloured glass or beads and gold round their neck, silver kada on their wrists and thick *toda* of silver on anklets.

The most common ornament for males in urban areas is the ring and, of course, the wrist watch which is highly popular not only in towns but also in villages. A few orthodox persons put on *kanthi* or gold chain round their neck.

The extent of use of silver or gold or jewellery in the making and wearing of ornaments is mostly governed by the social and economic status of the household and the class of society to which it belongs. Those who cannot afford to have ornaments of gold or jewellery rest content with simpler and cheaper ornaments made of silver or even of alloy and inferior metals. Moreover, the use of gold ornaments has been considerably

affected since the enforcement of Gold Control Order which has restricted the use of gold in the making of ornaments to 14 carats. This has resulted in the revival of some of the traditional silver ornaments such as *zanzar*, *kandoro*, ear-rings, etc., as also in the making of all those in silver which formerly used to be made in gold.

FURNITURE AND DECORATIONS—Household furniture and decorations usually reveal the taste, the status and the economic condition of the householder. To an urbanite furniture is no more a luxury now ; it is an essential item for comfortable living. In urban households, various types of furniture are in use. A well-to-do family dwelling in a spacious residence with separate bed-rooms and drawing rooms usually has one or more sofa-sets, chairs, teapoys, dining and study tables, woollen carpets, bedsteads and other items of furniture made of wood or steel according to its need and capacity. A radio set, wooden or steel cup-board, mirrors, attractive wall clocks, etc., are other items in common use by such a family. An ordinary educated middle class household too will have these pieces, though on a moderate scale. Others would rest content with a chair or two of ordinary type and a simple cot and a stool. *Hinchko* or swing continues to be a favourite item of furniture with all classes of people, the one used by poorer classes being cheaper made of a simple wooden plank.

The villagers at large have not yet become furniture-minded. An average agriculturist has a few bedsteads as the only item of furniture. But those who are better off go in for a chair or two, a *pat* or swing, a plain mirror, a simple wall clock and a wooden cup-board or a *patara* to store the valuables.

Houses of well-to-do families in urban areas are decorated with curtains, decorative mirrors, flower-pots, table lamps and pictures. Others have a picture or two or a calendar to adorn the house wall. Some of the houses in cities and villages have their doorways frequently decorated with *torans* made of glass beads. In villages, *chaklas* or suqare pieces of cloth beautifully embroidered in traditional designs or worked in bead are the popular mode of wall decoration. House walls are also decorated with pictures of Gods and Goddesses.

COMMUNAL LIFE

Garba and Ras—Among the various cultural activities and forms of entertainment in vogue in this district, mention must be made of folk-dance called *garba* and *ras* which had their origin in certain religious observances of the people, and later came to be associated with social occasions as a form of recreation and merriment. *Garbas* and *ras* so popular in Saurashtra are played both by men and women especially during Navratri (the first nine

days of the Hindu month of Ashvin) and are the commonest form of celebrations of this ancient festival in Gujarat. *Garbi*, played as it is by males, is more vigorous and has a quicker rhythm as compared with *garba*.

Ras or dandia-ras as it is called is a variation of the *garba* folk-dance played both by men and women. Each player has a pair of *dandia* (small sticks or batons) one in each hand. The players move round in a circle in pairs and strike alternately with their own and with those of their partners. The timing and spacing of movement, and steps and the tunes of folk-songs to the accompaniment of music, instrumental and vocal are so perfect, exquisite and graceful that they hold the audience spell-bound. To promote and propagate this fascinating art the State Government organises *garba-ras* competitions every year at different places in the State and awards special prizes and shields to those adjudged best.

Bhavai—Another item alike of entertainment and festive celebration is *bhavai*, a kind of folk-drama performed at night, and having as its themes some religious or social anecdotes of moral and entertainment value. *Rama-lila*, another type of folk-drama enacted in villages depict the life of Lord Rama. With the increasing influence of other forms of refined entertainment, the *bhavai* and *Rama-lila* have ceased to be popular. However, at a time when there was no organised theatre, *bhavai* provided good diversion to village folk. Its usefulness lies in its spontaneity, its folk-lore and drama which the villagers easily follow and in its inexpensive character which brings entertainment to the very doors of the villagers. Efforts are, therefore, being made after Independence to revive and encourage *bhavai* by State aid as a form of popular entertainment by including it as one of the items of the Annual Drama Festival organised in Gujarat.

PUBLIC GAMES AND RECREATION—While a good number of indigenous outdoor games has been replaced by western games, many of them have still retained their popularity. For example, the old games of *kabbadi*, *kho-kho* and *langadi* are still played both in towns and villages with almost the same zeal and interest as in the past. At the same time, games like *gilli-danda*, *ata-pata*, etc., are being forgotton in urban areas and their place is being taken up by such western games as cricket, football, tennis, volley ball, badminton, etc. The district has had the good fortune of producing famous cricketers like Prince Ranji, (the late Jam Ranjitsinhji), Prince Duleepsinhji, Vijay Marchant and Vinoo Mankad who have earned international fame in the world of cricket. Facilities for playing modern games are provided in colleges and schools, Inter-schools and Inter-collegiate game competitions are regularly organised. Other agencies like sports clubs and gymkhanas are also organising competitions and tournaments. Indoor games

like carrom, table tennis, etc., are popular among the youngsters, while playing cards, bridge and rummy is a favourite pastime with adults.

The elder section among the higher and middle classes prefer to go to clubs in the evening whereas the younger people studying at high schools and colleges have their own sports clubs, gymkhanas and associations. The city of Jamnagar has a number of such places including among others Ranjit Club, Summair Sports Club, Young Club, and a number of *akhadas* in various localities. The Rotary Club and the Lions Club have also come into existence in recent times. All these organisations obviously cater to the need of recreation mostly of all well-to-do and higher middle classes. But for a majority of others who have hardly the time and the money to spend after such pursuits, an occasional visit to picture houses is the only form of entertainment they can afford. Others rest content with visiting some temple either to hear *katha* or religious discourse or have *darshan* of the deity.

Villages have their own forms of entertainment and recreation. While children play such traditional games as *hu-tu-tu* and *kho-kho,* which are still popular, there are many others like *langadi, gilli-danda, santa-kukadi, pakad-dav, kukadi-dav,* etc., some of which are fast disappearing. For the adults, Bhajan Mandali and Ras Mandali provide rest and recreation at night, when the male folk assemble at the village *chora* and pass their time in singing devotional songs—*Bhajan* and *kirtan*. With the passage of time and the impact of Community Development programme, new forms of recreations are also coming up, though efforts are made to sustain and revive the older forms which are still popular with the people at large. These are *youth clubs* and *mahila mandals* which provide the younger generation with entertainment coupled with constructive activities of rural welfare.

HINDU CALENDAR—The celebration of various festivals by different religious communities is closely associated with the different systems of time reckoning or calendar in vogue in different parts of the country. Hindus of Jamnagar generally follow the Vikram Samvat (era) which precedes the Christian era by fifty-six years. The year begins with the month of Kartik, gets divided into three seasons, namely, winter consisting of the months of Kartik, Margashirsh, Paush and Magh; summer extending over the months of Phalgun, Chaitra, Vaishakh and Jyeshtha and monsoon over Ashadh, Shravan, Bhadrapad and Ashvin. Each month is divided into two fortnights, *shukla paksha,* the bright fortnight, when the moon is waxing and *krishna paksha,* the dark fortnight, when the moon is waning. Dates are reckoned by the day of the fortnight of each month.

Halari Samvat—This region which was formerly known as Halar and also named Halar district till 1959 had its own calendar called Halari Samvat,

which is still followed in many parts of the district. Also known as Ashadhi New Year it is a form of Vikram era commencing from Ashadh Sud 1 marking the beginning of the agricultural season.

JAIN CALENDAR—Jains generally follow Vir (Nirvan) Samvatsara which commenced in 527 B. C. from the day when Mahavir the last of the twenty-four Jain Tirthankars attained *nirvan* for the observance of their religious practices and events.

MUSLIM CALENDAR—Muslims in Jamnagar district generally follow Hijri era, though it is the Vikram era which is generally followed for accounting and commercial purposes. This era is Arabic in origin. The Hijri era came into being from 15th July 622 A. D. in the 42nd year of the life of prophet Mohammed to commemorate his *hijrat* from Mecca to Madina. A year according to this era is divided into the following 12 months. (1) Moharram. (2) Safar, (3) Rabi-ul-Awwal, (4) Rabi-us-Sani, (5) Jamadi-ul-Awwal, (6) Jamadi-us-Sani, (7) Rajab, (8) Shaaban, (9) Ramzan, (10) Shawwal, (11) Zilqaad, (12) Zilhijja.

FESTIVALS—Festivals as they are celebrated in this country symbolise people's cultural, social and religious aspirations which besides helping them to lead a fuller and better life also remove its monotony by providing physical diversion and mental recreation. Though principally associated with religion there is a number of occasions wherein the social aspect assumes prominence. In fact, festivals are special days, periods of time and seasons which are so designed as to ensure individual joy by practising religion commingled with social joy and domestic happiness.

Hindu Festivals— The Hindus have a number of festivals all the year round. The principal festivals which are observed by almost all castes and classes in the district include Divali and New year's Day. Makara Sankranti. Holi, Balev, Navratri and Dassera besides Mahashivratri, Ram Navami and Janmashtami which are mainly observed by the followers of the respective sects. There is a number of other festivals such as Bhai Bij, Dev Divali, Vasant Panchami, Nag Panchami, Rushi Panchami, Shitla Satam. Ganesh Chaturthi, etc., which are also popular in the district. The Akhatrij or Akshaya Tritiya, falling on Vaishakh Sud 3 and the Bhadarvi Amas occuring on the *amavasya* of Shravan have special significance for agriculturists. The Akhatrij is considered auspicious for beginning agricultural operations. The agriculturists worship their bullocks and implements and adore them with *kumkum* and flower. On Bhadarvi Amas which is considered to be the holiest among *amavasyas*, the farmers worship their bullocks and feed them. Fairs are also held in many places where people congregate in large numbers.

To devout Hindu every *ekdashi* is a sacred festival to be celebrated by observing fast and performing *kirtans*. Of all the *ekadashis* those falling on Kartik Sud 11 (Dev Uthi Ekadashi), Jyeshtha Sud 11 (Nirjala or Bhim Ekadashi), and Ashadh Sud 11 (Dev Podhi Ekadashi) are specially sacred. There are certain religious festivals which have special significance for ladies. These include Alunavrata during the month of Chaitra when women take *aluna* or saltless diet, Vat-Savitri Purnima (Jyeshtha Sud-15) when married women worship a banyan tree and keep awake the whole night for marital bliss and long life of their husband, Gauri Vrata or Jaya-Parvati Vrata observed for five days from Ashadh Sud 11 to 15 both by married women and maidens in dedication to the worship of Goddess Gauri or Parvati, and Divaso (falling on the last day of Ashadha) when Hindu women observe fast and keep awake the whole night to please Goddess Parvati for marital bliss. Randhan Chhath (Shravan Vad 6) is an important day for ladies, which is devoted to cooking food for the day following sacred to Shitla Mata or the Goddess of small-pox when the Goddess Shitla is supposed to wander about among the hearth. Artificial heat by kindling the fire in the oven or hearth is therefore, avoided on that day for fear of annoying the Goddess. In the morning of Shitla Satam the lady of the house worships the Goddess under a *pipal* (*ficus religiosa*) tree whereafter the food cooked the previous day is taken by the household. Some of the festivals which are important and popular in the district are described below in brief.

Divali—Of all the numerous festivals celebrated in the district, the most important and most popular among the people is the Divali, appropriately known as the queen of festivals. It is both the climax and commencement of the yearly cycle of festivals, marking the close of the old year and ushering of the new. Its celebration is, therefore, spread over six consecutive days starting from the Ashvin Vad 12, (Vagh Barash) and extending up to Kartik Sud 2, (Bhai Bij).

On Vagh Barash, also known as Govatsa Dwadashi, a cow with a calf is worshipped in the evening on its return from grazing and fed with a preparation of *adad*. Dhan Terash is dedicated to the worship of Laxmi, Goddess of Wealth. In rural areas cows are adorned, their horns and hoofs are painted and their necks decorated with strings of bronze bells. Kali Chaudash, also known as Narak Chaturdashi is dedicated to Goddess Mahakali. It derives its name from the demon king Narakasur, who was killed on this day. The day is also important for the worship of Hanuman, who killed the demons Ahi Ravan and Mahi Ravan on this day and was, therefore, offered oil and red lead by Ram and Lakshman. Divali is celebrated by all sundry on the *amavasya* of Ashvin. The day is very important to merchants who close their yearly accounts on this day, and open new account books with a ceremonial worship of Lakshmi and Sharda.

This ceremony is called *chopda pujan* or *vahi pujan*. During Divali festivals houses are decorated and made clean and tidy. Lamps (*dipmalas*) are lighted in every house, *rangoli* and *sathiya* designs are drawn near the entrance doors and crackers are fired at night.

The New Year day is the most important day of the year for the people. They get up unusually early in the morning. After bath and obeisance to the household deity people visit temples and then go to pay respect to their elders and exchange greetings with relatives and friends. At every house dishes of sweet preparations are offered to the visitors. Salt or *sabras* which is the essence of all tastes is the first thing bought in the morning as a good omen representing the zest of life. Divali being also a harvest festival coming on the close of the rainy season, *annakuta*, i. e., all possible varieties of food prepared from new grain is offered to the gods. *Annakuta* ceremony at Dwarkadhish temple of Dwarka draws a large number of devotees.

The day following the New Year Day is known as Bhai Bij and is dedicated to the ideal love between brother and sister. Every Hindu housewife invites her brother to her home on this day and feasts him. The brother in return gives her a present in cash or in the form of some article of her choice.

Makara Sankranti—The day on which the sun enters the orbit of Makara (Capricorn) is called Makara Sankranti. On this day cows are worshipped in the morning and fed with boiled *bajri* or *jowar* known as *ghughri* or *tethawa*. Foodgrains are distributed to the poor and needy. The day has a special significance to the agriculturists as by Makara Sankranti the Kharif crops are ready and brought home. These are shared with others, as gift of grain earns great religious merit on this day. Grass is freely distributed to the village cattle. Kite flying is a favourite pastime of the young and old.

Holi or Hutashani—Holi or Hutashani is celebrated as a festival of spring by young and old alike. It is an ancient festival held at a time when the Rabi crops like wheat, gram, cotton, *til*, etc., are harvested and brought in the market. Holi fire is lighted at night at every village and in every part of the town or city and worshipped by all. The day after Holi is known as Dhuleti, celebrated by spraying colours and indulging in revelry and fun.

Balev or Coconut Day—On Shravan Sud 15 four distinct ceremonies, namely, (i) Shravani, (ii) Rakshabandhan, (iii) Balev and (iv) Coconut day are celebrated. The day is known as Shravani as it falls in the month of Shravan. Brahmins change their sacred thread. Sisters tie *rakhadi* or *raksha* around the right wrist of their brothers as a charm protecting them from evils during the ensuing year. The day is also known as Nariyeri Punam or

coconut day as in coastal areas, merchants, traders and others offer coconut to Sea God Varun as it is from this day that the boats are put to sail.

Janmashtami—The festival to celebrate Shri Krishna's birthday falls on the eighth of the second half of Shravan and is known as Gokulashtami or Janmashtami. This festival has special significance for Dwarka which was the adopted home and capital of Lord Krishna. A large number of devout Hindus from distant places come to Dwarka to have a *darshan* of Shri Krishna at the Dwarkadhish temple where the birth ceremony is observed at mid-night. Devout Vaishnavas observe fast for the whole day. A good number of fairs are held on this day at various places among which the fairs held at Jamnagar and Dwarka are more popular.

Navratri—Navratri or the festival of nine nights begins from the first day of Ashvin and extends over nine days. It is sacred to the Mother Goddess whose ten manifestations are described in Devi Mahatmya of Markandeya Purana. The Goddess is worshipped daily during these days and earthen pots pierced with numerous holes, containing a light called *garbo* are kept near the image or trident of the Goddess. The lamp is kept burning throughout the night and day during the entire Navratri period. Prayers and *garbas* in praise of goddess are sung by devotees. On the ninth day of the festival the *havan* ceremony is performed and *naivedya* (food offering) offered to the goddess and its *prasad* distributed.

Dassera—The Navratri festival is immediately followed by Dassera so called from *das* (ten) and *ahar* (day). It is also called Vijayadashami or the tenth of victory as it commemorates the victory of Ram over Ravan. It is also believed that on this day Goddess Durga killed the demon Mahishasur after the nine-day battle. Vijayadashami is thus the day of victory of good over evil and is considered auspicious day to start any new work. Great importance is attached to the worship of *shami* (*prosopis spicigera*) tree on this day. It is believed that one who worships *shami* tree on this day is freed from sins committed by his ten senses. The day is, therefore, called Dash-hara. The day has a special significance to Kshatriyas, who during the former princely States celebrated the day very pompously.

Over and above the festivals described above which are observed by Hindus, such national festivals as the Independence Day, the Republic Day, and the Gandhi Jayanti Day are observed by people belonging to all castes and communities in the district.

Jain Festivals—Jain festivals are generally associated with severe austerities and fasting and always with worship. The devotee is required to avoid, in addition to roots which are prohibited on ordinary days, leafy

vegetables, dry fruits, tasty food preparations, milk and curd and in some cases even water, when severe austerities and penance are enjoined. For jainism lays great emphasis on *tap* penance as a means of earning religious merit. And so it is the religious aspect which is for the most part prominent in Jain festivals.

The principal Jain festivals are Paryushana, Oli (Siddhachakra Puja), Kartik Purnima, and Mahavir Jayanti.

Kartik Purnima (Kartik Sud 15) marks the close of the austerities of *chaturmas* or the four monsoon months starting from Ashadh Sud 15. Devout Jains who have undertaken the austerities of *chaturmas* end them on this day. The day is also observed as the birthday of Shri Hemchandracharya, the well known learned Jain savant who was born this day of Vikram Samvat 1145.

Paryushana or *Pajusan* the most sacred of the Jain festivals is the occasion of continuous religious activities and strict austerities. It is observed by all, high and low. The Shwetambars observe it from Shravan Vad 12 to Bhadrapad Sud 4, the Digambars from Bhadrapad Sud 5 to Sud 14. Complete fasts are enjoined to be undertaken during *Paryushana*. Those who cannot fast on all the days should fast atleast for some days during this *parva*. Everybody fasts on the last day popularly known as Samvatsari, considered to be the most sacred of all. Samvatsari denotes the annual *pratikraman* or expiation of sins, directed to be performed during *Paryushana*. On this day as an atonement of his sins, every Jain asks forgiveness of others for any offence that he might have given during the year gone by. This is known as *khamavavun* or pardon.

Oli-Siddhachakra Puja (Chaitra and Ashvin Sud 7 to 15) Shwetambars consider this festival next in importance only to *Paryushana* and celebrate it for nine days from Sud 7 to *purnima* twice a year in Chaitra and Ashvin. During these days *navpadas* nine steps-represented on the Siddhachakra or Saint's wheel are worshipped in every Shwetambar temple. Partial fast is observed on all these days.

Mahavir Jayanti (Chaitra Sud 13) is the birth anniversary of Mahavir Swami, the 24th and the last Jain Tirthankar born in 599 B. C. Besides religious ceremonies at the temple, processions are taken out with the idol of Mahavir. Digambar Jains also celebrate Virashasan Jayanti on Shravan Vad 1, the day on which Mahavir after achieving omniscience, gave his first religious sermon.

Jains also observe the *nirvan-kalyanak* or the holy anniversary of the *nirvan* of Mahavir on the Divali day (Ashvin Vad 30).

Muslim Festivals—The two sects, Sunnis and Shiahs, have different holidays except Muharram, Ramzan and Bakri-Id festivals which are common to both. In the beginning of the year comes the month of Muharram which is held by Shiahs in special veneration as being the month in which Imam Hussain, the son of Ali, was killed. His death is the subject of public mourning during the first ten days when fasting and self-denial are also enjoined. An interesting religious activity in the Muharram festival is the preparing of *taziahs* or *tabuts*, bamboo and tinsel models of the shrine of the Imam at Karbala. These shrines are taken round in procession on the tenth day and submerged into water of a river or lake. Sweet bread and sugared water are distributed among friends in the evening. Shiahs, unlike Sunnis, keep Muharram for forty days. Of these, the first ten are a time of special mourning.

The thirteenth of Safar is known as Tera Tezi or Talan Tezi and kept by Sunnis in memory of the Prophet's recovery from a severe sickness. Another important day is the twelfth of the month of Rabi-ul-Awwal, the *wafat* or day of the Prophet's death. This day is called Id-e-Milad as it is also the day of the birth of the Prophet, *Id* meaning happiness and *milad* meaning birth. It is celebrated more as the birth anniversary than as the day of death of the Prophet. The *gyarvi* festival falls on the eleventh day of Rabi-ul-Sani on which Sunnis celebrate the birth of Saiyad Abdul Kadir Jilani by illuminating their houses and eating *malidah* (powdered sugar bread) at night. On the first eleven nights of Rabi-ul-Awwal in honour of the Prophet's birth *waazes* (sermons) are preached. Great numbers attend them and on the eleventh day, charitable people give a morsel of sacred food called *taburruk* to every one present. The Shab-e-Barat which falls on the night of the fourteenth day of Shaaban is among Sunnis characterised by the preparations of special dishes, which are distributed to the poor after the recitation of the *fatiha* (opening chapter of the *Quran*) and by feasting of friends and relations. Greater than this festival is the Id-ul-Fitr commonly known as Ramzan Id which falls on the first day of Shawwal. Throughout the preceding month of Ramzan a general fast is observed everyday from sunrise to sunset, prayers known as *taraveeh* are offered in the mosque and *Quran* recited during the month. Ramzan Id marks the close of the fast and in consequence Musalmans-Sunnis and Shiahs of all ages and both sexes bathe, put on new clothes, perfume themselves, repair to the mosque, and thereafter foregather with friends and relations and bid them God-speed. The Id-e-Baqr falls on the tenth day of Zilhijja and is characterised, like Ramzan Id, by prayers in mosques. The eighteenth of Zilhijja is a great Shiah holiday known as Id-e-Ghadir or the lake holiday. On this day the Prophet seated by a lake proclaimed in a joyous moment that Ali was his own flesh and body. Shiahs also observe the twenty-eighth of Zilhijja as a festival of three days in memory of Baba Shuja-ud-din a fire worshipping convert to Islam, who on this day murdered the Khalifah Umar.

PILGRIM PLACES—The important places of pilgrimage in the district are (1) Dwarka, (2) Shankhoddhar Beyt and (3) Nageshwar all of them in Okhamandal taluka. Dwarka is considered one of the four principal places of pilgrimage in India. It is well known for its *Jagat Mandir* or the Dwarkadhish Temple dedicated to Lord Krishna and the Shardapith of the Jagadguru Shankaracharya. It is visited every year by thousands of pilgrims coming from all over the country. Beyt or Shankoddhar Beyt is also a well known place of pilgrimage invariably visited by all pilgrims coming to Dwarka. Nageshwar is famous for the holy temple of Nageshwar Mahadev, which is considered to be one of the 12 *Jyotir Lingas* in India, referred to as Nagesh in Darukvan. Details about these places are given in Chapter XVIII—Places of Interest.

FAIRS

Fairs are generally associated with deities and religious observances. The following statement gives the names of deities to which the fairs are sacred, months in which they are held and the number of persons participating.

STATEMENT III.11

Fairs According to Deity, Months and Size of Congregation (in Descending Order of Congregation)

Deity	Month	No. of fairs	Congregation	Below 5,000 No. of fairs	Below 5,000 Congregation	5,000 to 9,999 No. of fairs	5,000 to 9,999 Congregation
1	2	3	4	5	6	7	8
Total ..		**46**	**339,350**	**26**	**41,350**	**11**	**68,000**
KRISHNA .	August ..	*18*	*179,700*	*10*	*17,200*	*5*	*32,000*
SHIVA ..	*Total* ..	*11*	*71,950*	*5*	*7,450*	*1*	*5,000*
	August .	9	70,250	3	5,750	1	5,000
	September .	2	1,700	2	1,700	..	..
RAMDEV PIR ..	September ..	*2*	*40,450*	*1*	*450*	..	..
LOKMELA ..	*Total* ..	*2*	*13,000*	..	..	*2*	*13,000*
	August ..	1	5,000	..	..	1	5,000
	September ..	1	8,000	..	..	1	8,000
MUSLIM PIRS ..	*Total* ..	*5*	*10,400*	*4*	*5,400*	*1*	*5,000*
	October .	1	400	1	400	..	..
	Safar .	1	5,000	..	..	1	5,000
	Zilqaad ..	1	4,000	1	4,000	..	..
	Zilhijja .	2	1,000	2	1,000	..	..
LOCAL HEROES	August ..	*1*	*8,000*	..	..	*1*	*8,000*
LOCAL DEITIES	September	*2*	*6,000*	*1*	*1,000*	*1*	*5,000*
SATI .	August	*1*	*4,000*	*1*	*4,000*	..	..
SHITLA MATA ..	August .	*1*	*1,600*	*1*	*1,600*	..	..
MATAJI ..	September ..	*1*	*1,000*	*1*	*1,000*	..	..
LOCAL SAINTS ..	April ..	*1*	*500*	*1*	*500*	..	..
MISCELLANEOUS	August ..	*1*	*2,750*	*1*	*2,750*	..	..

Deity	Month	10,000 to 24,999 No. of fairs	10,000 to 24,999 Congregation	25,000 to 49,999 No. of fairs	25,000 to 49,999 Congregation	50,000 and above No. of fairs	50,000 and above Congregation
1	2	9	10	11	12	13	14
Total ..		**7**	**90,000**	**1**	**40,000**	**1**	**100,000**
KRISHNA ..	August ..	*2*	*30,500*	..	..	*1*	*100,000*
SHIVA ..	*Total* .	*5*	*59,500*	..	..	..	..
	August ..	5	59,500	..	..	..	..
	September ..	..	..	..	..	..	..
RAMDEV PIR ..	September ..	..	..	*1*	*40,000*	..	..
LOKMELA .	*Total* ..	..	..	..	..	..	..
	August ..	..	..	..	..	..	..
	September ..	..	..	..	..	..	..
MUSLIM PIRS .	*Total* ..	..	..	..	..	..	..
	October ..	..	..	.	..	..	..
	Safar ..	..	.	..	..	..	..
	Zilqaad ..	..	..	..	..	..	..
	Zilhijja .	..	..	..	..	..	..
LOCAL HEROES	August ..	..	.	.	.	..	..
LOCAL DEITIES	September ..	..	..	..	..	..	..
SATI ..	August ..	..	..	..	..	..	..
SHITLA MATA	August ..	..	..	..	..	..	..
MATAJI ..	September ..	..	..	..	..	..	..
LOCAL SAINTS ..	April	..	..	..	..	..	..
MISCELLANEOUS	August ..	..	..	..	..	..	..

Source :

Census of India 1961, Gujarat, Vol. V, Part VII-B, *Fairs and Festivals*, (Part II, Tables), p. 240

As the statement indicates the total number of fairs reported in the district every year comes to 46. As many as thirty-two of them are held in August/Shravan. The congregation at these fairs varies according to the season and exigencies of agricultural operations. The largest number of fairs (18) is held in reverence to Lord Krishna, who attracts 179,700 devotees. Next in order (11) are fairs dedicated to Lord Shiva, with a total congregation of 71,950. Other fairs are dedicated to local deities, local saints, local heroes, Ramdev Pir, etc.

The fairs which deserve specific mention are the Janmashtami fair at Jamnagar, Dwarka, Beyt and the Ramdev Pir fair at Vodisang in Kalavad taluka. Apart from the usual religious practices of having a dip in the holy waters of the river or sea and reverence to the deity, cultural activities are also organised by the Taluka Development authorities, who arrange seminars, cinema shows, lectures and exhibitions for the visiting public where posters depicting the development activities are displayed.

Janmashtami Fair at Jamnagar—People from neighbouring villages participate in the Janmashtami fair at Jamnagar in which over and above the permanent shops of the town, about 200 stalls and booths erected. The main articles sold include toys of various kinds—earthen, plastic, wooden, rubber, as also tin, brass and iron wares, cutlery, hosiery, perfumery and articles of food and drink. Besides these there are tea-shops, show-rooms, advertisement booths, pavement photographers, etc. Items of recreation include merry-go rounds, giant wheels, circuses, magic shows and gymnastic displays. Entertainment programmes and meetings are arranged by different organisations of the city. The fair is orgainsed by the Jamnagar Borough Municipality which looks after sanitary arrangements Special buses ply to the site of the fair from distant areas of the city. The fair is divided into two by the river Nagmati. The open ground on the bank towards the city side starting from the bridge is generally reserved for booths of magic shows, the Well of Death wherein motor cyclists perform their feats, merry-go-rounds, and such other items of entertainment. Boating in the river is a very popular pastime. On the opposite bank across the river beyond the imposing building of the Vohra Haiira, numerous stalls display articles for sale. Ras Mandalis from neighbouring villages specially invited on this occasion lend additional enchantment and entertainment at the fair.

Janmashthami Fair at Dwarka and Beyt—Janmashtami has a special significance to the people of Dwarka which was the adopted home of Lord Shri Krishna.. A fair is organised here on Shravan Vad 8 in commemoration of the birth of the Lord at Mathura. The fair is attended by about 17,000 persons including those coming from the nearby villages. Devout Hindus from distant places also come to Dwarka for the *darshan* of Shri Krishna at the Dwarkadhish temple. A large number of stalls selling and exhibiting a

veriety of items are erected specially for the fair which is organised by the Dwarka Temple Committee.

A similar fair is held at Beyt which is attended by 1,500 to 2,000 persons from surrounding villages. The fair is organised by the Beyt Devasthan Samiti.

Ramdev Pir Fair at Vodisang—A fair on a very large scale is held on Bhadrapad Vad 9, 10 and 11 (September in commemoration of Ramdev Pir[1] at the temple dedicated to him at village Vodisang in Kalavad taluka. The fair is held on the open land nearby and attracts about 40,000 persons, Hindus and others, most of whom come from the surrounding villages. Non-Hindus attending the fair number about 2,000. The fair is organised by the leading persons of village Vodisang. Vaishakh Sud 2, the birthday of Ramdev Pir, is also considered sacred at the temple.

The New Trends—Of late and particularly after Independence, far reaching changes in every walk of life have been taking place in different parts of the country in matters of dress, ornaments, social customs, habits of the people their mode of living and their religious beliefs and practices. The influence of the teaching of Mahatma Gandhi who advised plain living is keenly felt in all strata of society. Simplicity has been recognised as a virtue and accepted as a keynote of social behaviour. The rich and the poor take equal delight and pride in wearing khaddar. The social superiority and other privileges that the feudal and monied classes once enjoyed and the humiliating treatment that the disadvantageous classes received at their hands no longer persist. The evils of untouchability have begun to disappear slowly but gradually. Scope of higher education and entry into Government service has opened up for them new vistas of economic advancement. Women are taking a rightful place in society as equal partners of men in the pursuit of political as well as economic activities. The civil or inter-caste marriages which were unheard of in the past are gradually on the

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1. Ramdev is a legendry hero of Rajasthan who is worshipped as a *pir* or saint and is very popular among lower caste Hindus, especially in Saurashtra, Kutch and in northern and central Gujarat. Being a Rajput he is represented as a bearded warrior riding a horse and holding an arrow or a spear in hand. His shrines are generally small. Associated with the installation of the image of Ramdev Pir in temple at Vodisang, is the legend that a Rabari of Vodisang named Hira Bhagat had a dream in which Ramdev Pir gave him *darshan* and promised to come to Vodisang if his idol would be installed in that village The image was accordingly installed in the temple on Bhadrapad Vad 11 of Vikram Samvat 2014 (1958 A. D.) since when the fair is held here every year. The fair thus marks the anniversary of the establishment of the temple.

increase. The spirit of independence and self-reliance pervades everywhere. People have become politically conscious and aware of their rights and responsibilities. Even an illiterate agriculturists takes keen interest in the day-to-day developments of the country.

Prior to Independence Agricultural condition in the peninsula of Kathiawar was far from happy. Besides land revenue in the form of crop share a number of levies were recovered from the cultivators under various names. This left the cultivator little from his own produce. In Girasdari and other areas, the agriculturists were mere tenants-at-will who did not enjoy any occupancy rights over the land hired by them. To put an end to this anomalous and unhappy condition, the Government of Saurashtra implemented a number of land reform measures, such as abolition of Girasdari, conferment of occupancy rights, introduction of cash assessment on the basis of rates prevailing in the neighbouring areas and abolition of various cesses and perquisites. All these measures went a long way in improving the social and economic structure of the countryside by making the tiller the occupant of the land held by him and giving him security of tenure and fixity of land revenue payable by him. Various schemes of agricultural development which tended to increase the out-put of land were simultaneously taken in hand. The pace of industrialisation and urbanisation also offered greater scope of employment in urban pursuits. The entire economy of the district has been thus undergoing quick transformation as a result of concentrated efforts the State and the people are making in various fields of economic activities. These will reviewed in the Chapters that follow.

STATEMENTS

STATEMENT III.8

Census Houses and the uses to which thich they are put

Sl. No. 1	Taluka 2	Total/ Rural/ Urban 3	Total No. of census houses 4	Census houses vacant at the time of house listing 5	Occupied census houses used as: Dwellings: Dwellings 6	Shop-*cum*-dwellings 7	Workshop-*cum*-dwellings 8	Non dwellings 9	Others 10	Total/ Rural/ Urban 3	Taluka 2
	Jamnagar District	**T**	**232,797**	**25,950**	**145,287**	**301**	**271**	**17,489**	**43,499**	**T**	**Jamnagar District**
		R	**150,033**	**15,355**	**91,642**	**245**	**231**	**7,412**	**35,248**	**R**	
		U	**82,764**	**10,595**	**53,745**	**56**	**40**	**10,077**	**8,251**	**U**	
1	Jamnagar ..	T	67,276	7,217	45,189	75	56	6,785	7,954	T	1 Jamnagar
		R	24,280	3,235	14,971	33	51	1,197	4,793	R	
		U	42,996	3,982	30,218	42	5	5,588	3,161	U	
2	Jamnagar City (M) Area in sq. miles 5.57, sq. km. 14.43	U	37,604	3,056	26,557	37	5	5,168	2,781	U	2 Jamnagar City (M) Area in sq. miles 5.57, sq. km. 14.43
3	Dhrol ..	T	10,950	1,581	6,348	8	51	675	2,287	T	3 Dhrol
		R	7,276	687	4,481	8	19	315	1,766	R	
		U	3,674	894	1,867	..	32	360	521	U	
4	Jodiya ..	T	17,605	1,638	11,026	22	15	1,062	3,842	T	4 Jodiya
		R	14,819	1,123	9,390	21	15	791	3,479	R	
		U	2,786	515	1,636	1	..	271	363	U	
5	Kalavad ..	T	27,511	1,248	12,288	12	38	1,162	12,463	T	5 Kalavad
		R	24,338	964	10,634	12	38	998	11,692	R	
		U	3,173	284	1,654	..	..	464	771	U	

6	Lalpur ..	T	14,939	1,704	9,231	20	9	880	3,095	T	6 Lalpur
		R	13,302	1,575	8 219	20	9	611	2,868	R	
		U	1,637	129	1,012	..	..	269	227	U	
7	Jamjodhpur ..	T	21,009	1,268	13,345	27	52	1,518	4,799	T	7 Jamjodhpur
		R	17,080	925	10,903	27	51	991	4,183	R	
		U	3,929	343	2,442	..	1	527	616	U	
8	Okhamandal ..	T	17,760	2,945	11,711	14	4	1,474	1,612	T	8 Okhamandal
		R	5,895	1,135	4,129	3	2	311	315	R	
		U	11,865	1,810	7,532	11	2	1,163	1,297	U	
9	Kalyanpur ..	T	17,488	2,536	11,874	69	13	1,010	2,186	T	9 Kalyanpur
		R	17,488	2,336	11,874	69	13	1,010	2,186	R	
		U	..	..	..	..	..	..	..	U	
10	Khambhalia ..	T	22,007	4,380	14,079	28	11	1,450	2,059	T	10 Khambhalia
		R	13,114	2,103	9,038	26	11	528	1,408	R	
		U	8,893	2,277	5,041	2	..	922	651	U	
11	Bhanvad ..	T	16,252	1,633	10,196	26	22	1,173	3,202	T	11 Bhanvad
		R	12,441	1,272	7,903	26	22	660	2,558	R	
		U	3,811	361	2,293	..	..	513	644	U	

Source.
Census of India 1961, Vol. V, Gujarat, Part IV-B, *Housing and Establishment Tables*, pp. 2-3

STATEMENT

Distribution of Sample Households Living in Census House Used Wholly or Material of Roof (Based on

Sl. No.	Taluka		Total/ Rural/ Urban	Total No. of house-holds	Predominant: Grass, leaves, reeds or bamboo	Timber	Mud	Unburnt bricks	Burnt bricks
1	2		3	4	5	6	7	8	9
	District Total	..	**T**	**29,278**	**96**	**46**	**1,646**	**1,276**	**3,487**
			R	**18,461**	**78**	**14**	**1,035**	**967**	**1,771**
			U	**10,817**	**18**	**32**	**611**	**309**	**1,716**
1	Jamnagar	..	T	9,108	18	32	998	126	1,488
			R	3,025	9	4	469	95	140
			U	6,083	9	28	529	31	1,348
2	Dhrol	..	T	1,285	2	..	5	89	206
			R	905	2	..	1	82	165
			U	380	..	..	4	7	41
3	Jodiya	..	T	2,224	4	..	35	227	864
			R	1,895	3	..	34	225	813
			U	329	1	..	1	2	51
4	Kalavad	..	T	2,474	3	..	68	294	87
			R	2,143	3	..	67	294	55
			U	331	..	..	1	..	32
5	Lalpur	..	T	1,858	23	1	85	24	76
			R	1,656	23	1	85	24	76
			U	202	..	..	..	..	..
6	Jamjodhpur	..	T	2,692	3	2	111	130	130
			R	2,202	2	..	89	67	83
			U	490	1	2	22	63	47
7	Okhamandal	..	T	2,360	13	2	9	..	184
			R	829	8	..	2	..	..
			U	1,531	5	2	7	..	184
8	Kalyanpur	.	R	2,394	4	7	10	9	51
9	Khambhalia	.	T	2,833	24	2	238	358	193
			R	1,821	23	2	222	152	180
			U	1,012	1	..	16	206	13
10	Bhanvad	..	T	2,050	2	..	87	19	208
			R	1,591	1	..	56	19	208
			U	459	1	..	31	..	..

Source :

Census of India 1961, Vol. V, Gujarat, Part IV-B, *Housing and Establishment Tables*, pp. 474-475

III.9

Partly as Dwelling by Predominant Material of Wall and Predominant 20 per cent Sample)

material of wall				Predominant material of roof						
C. I. sheets or other metal sheets	Stone	Cement con-crete	All other mate-rial	Grass, leaves, reeds, thatch wood or bamboo	Tiles, slate, shingle	Corru-gated iron, zinc or other metal sheets	Asbes-tos cement sheets	Brick and lime	Con-crete and stone	All other material
10	11	12	13	14	15	16	17	18	19	20
212	22,151	244	120	819	24,153	817	526	9	2,820	134
97	14,425	56	18	628	17,099	168	42	..	496	28
115	7,726	188	102	191	7,054	649	484	9	2,324	106
78	6,146	122	100	227	6,421	514	273	9	1,562	102
..	2,294	14	..	93	2,834	33	11	..	53	1
78	3,852	108	100	134	3,587	481	262	9	1,509	101
..	982	1	..	18	1,239	11	..	..	17	..
..	654	1	..	15	874	9	..	..	7	..
.	328	..	..	3	365	2	..	..	10	..
2	1,057	34	1	20	2,175	5	..	..	24	..
2	786	31	1	17	1,862	3	..	..	13	..
.	271	3	..	3	313	2	..	..	11	..
5	2,012	2	3	44	2,327	2	3	..	94	4
5	1,714	2	3	41	2,006	2	3	..	87	4
..	298	..	..	3	321	..	.	..	7	..
1	1,658	1	9	81	1,686	13	4	..	61	13
1	1,457	..	9	76	1,498	13	4	..	53	12
	201	1	..	5	188	..	..	..	8	1
.	2,315	.	1	86	2,362	25	11	..	207	1
.	1,961	.	..	75	1,946	16	7	..	158	..
..	354	..	1	11	416	9	4	..	49	1
37	2,037	76	2	102	1,280	164	220	..	591	3
.	818	..	1	92	693	16	2	..	26	..
37	1,219	76	1	10	587	148	218	..	565	3
46	2,259	6	2	60	2,262	48	.	..	21	3
43	1,972	1	2	104	2,609	28	3	..	86	3
43	1,196	1	2	80	1,692	23	3	..	11	3
..	776	..	..	15	917	5	..	..	75	..
.	1,733	1	..	77	1,792	7	12	..	157	5
..	1,306	1	..	70	1,432	5	12	..	67	5
..	427	..	..	7	360	2	..	..	90	..

STATEMENT III.10

Sample Households Classified by Number of Members and by Number of Rooms Occupied (Based on 20 per cent Sample)

Sl. No.	Taluka	Total/ Rural/ Urban	Total No. of households	Total No. of members: Males	Total No. of members: Females	Total No. of rooms	Households with no regular room: No. of households	Households with no regular room: No. of members: Males	Households with no regular room: No. of members: Females	Households with one room: No. of households	Households with one room: No. of members: Males	Households with one room: No. of members: Females
1	2	3	4	5	6	7	8	9	10	11	12	13
	Jamnagar District ..	T	29.278	86,036	82,983	47,507	64	148	146	17,455	45,709	43,942
		R	18,461	55,771	53,863	27,786	50	119	113	11,996	32,628	31,444
		U	10,817	30,265	29,120	19,721	14	29	33	5.459	13,081	12,498
1	Jamnagar ..	T	9,108	25,899	24,744	15,528	19	33	39	4,925	12,151	11,415
		R	3,025	8,947	8,434	4,412	8	11	10	2,015	5,356	5,061
		U	6,083	16,952	16,310	11,116	11	22	29	2,910	6,795	6,354
2	Jamnagar City (M)	U	5,349	15,038	14,612	10,205	11	22	29	2,316	5,383	5,108
3	Dhrol	T	1,285	3,923	3,814	2,162	..	..	..	731	1,941	1,877
		R	905	2,806	2,767	1,523	..	..	..	523	1,423	1,381
		U	380	1,117	1,047	639	..	..	..	208	518	496
4	Jodiya	T	2,224	6,587	6,478	3,872	9	15	19	1,117	2,910	2,819
		R	1,895	5,778	5,602	3,249	9	15	19	956	2,563	2,446
		U	329	809	876	623	..	..	..	161	347	373
5	Kalavad	T	2,474	7,522	7,380	3,661	4	9	12	1,622	4,492	4,427
		R	2,143	6,586	6,548	3,094	4	9	12	1,441	4,061	4,054
		U	331	936	832	567	..	..	..	181	431	373
6	Lalpur	T	1,858	5,578	5,353	2,846	15	52	50	1,182	3,235	3,082
		R	1,656	4,988	4,808	2,494	15	52	50	1,080	2,989	2,851
		U	202	590	545	352	..	..	—	102	246	231

7	Jamjodhpur ..	T	2,692	7,654	7,651	4,421	3	3	..	1,568	3,949	3,828
		R	2,202	6,376	6,278	3,712	3	3	..	1,244	3,089	3,020
		U	490	1,458	1,403	709	..	..	..	324	860	802
8	Okhamandal ..	T	2,360	6,406	5,966	3,699	6	15	6	1,565	4,053	3,919
		R	829	2,395	2,268	1,018	3	8	2	697	1,951	1,845
		U	1,531	4,01[illegible]	3,698	2,681	3	7	4	868	2,102	1,974
9	Kalyanpur* ..	R	2,394	7,487	7,172	3,324	5	12	12	1,710	4,712	4,622
10	Khambhalia ..	T	2,833	8,721	8,672	4,890	..	..	..	1,668	4,558	4,629
		R	1,821	5,545	5,467	2,716	..	..	..	1,215	3,323	3,270
		U	1,012	3,176	3,205	2,174	..	..	..	453	1,235	1,359
11	Bhanvad ..	T	2,050	6,079	5,723	3,104	3	9	8	1,367	3,708	3,424
		R	1,591	4,863	4,519	2,244	3	9	8	1,115	3,161	2,888
		U	459	1,216	1,204	860	..	..	..	252	547	536

Source :

Census of India 1961, Vol. V, Gujarat, Part IV-B, *Housing and Establishment Tables*, pp. 504-505

*Entirely rural

STATEMENT III.10—*contd.*

Sl. No	Taluka	Total/ Rural/ Urban	Households with two rooms: No. of house-holds	Households with two rooms: No. of members: Males	Households with two rooms: No. of members: Females	Households with three rooms: No. of house-holds	Households with three rooms: No. of members: Males	Households with three rooms: No. of members: Females	Households with four rooms: No. of house-holds	Households with four rooms: No. of members: Males	Households with four rooms: No. of members: Females	Households with five rooms or more: No. of house-holds	Households with five rooms or more: No. of members: Males	Households with five rooms or more: No. of members: Females
1	2	3	14	15	16	17	18	19	20	21	22	23	24	25
	Jamnagar District ..	**T**	**8,319**	**26,560**	**25,678**	**1,794**	**6,517**	**6,301**	**1,056**	**4,077**	**4,182**	**590**	**3,025**	**2,734**
		R	**4,642**	**15,643**	**15,116**	**1,046**	**4,062**	**3,899**	**491**	**1,986**	**2,090**	**236**	**1,333**	**1,201**
		U	**3,677**	**10,917**	**10,562**	**748**	**2,455**	**2,402**	**565**	**2,091**	**2,092**	**354**	**1,692**	**1,533**
1	Jamnagar ..	T	2,998	9,104	8,802	584	2,008	1,994	391	1,474	1,529	191	1,039	965
		R	754	2,404	2,365	142	541	524	72	345	310	34	200	164
		U	2,244	6,700	6,437	442	1,467	1,470	319	1,129	1,219	157	839	801
2	Jamnagar City (M)	U	2,132	6,332	6,105	419	1,363	1,382	316	1,115	1,202	155	823	786
3	Dhrol ..	T	375	1,205	1,202	93	354	336	53	207	214	33	216	185
		R	246	816	808	77	287	278	39	165	178	20	115	122
		U	129	389	394	16	67	58	14	42	36	13	101	63
4	Jodiya	T	749	2,342	2,341	218	765	751	90	362	351	41	193	197
		R	649	2,109	2,060	185	671	648	64	249	262	32	171	167
		U	100	233	281	33	94	103	26	113	89	9	22	30
5	Kalavad	T	643	2,210	2,144	120	470	455	58	202	233	27	139	109
		R	542	1,903	1,865	91	369	355	46	146	178	19	98	84
		U	101	307	279	29	101	100	12	56	55	8	41	25
6	Lalpur	T	468	1,553	1,465	114	421	410	50	194	214	29	123	132
		R	399	1,317	1,252	96	360	357	39	153	174	27	117	124
		U	69	236	213	18	61	53	11	41	40	2	6	8

7	Jamjodhpur	..	T	765	2,498	2,493	200	739	686	103	413	430	53	241	244
			R	629	2,019	2,018	154	674	628	93	368	384	49	223	222
			U	136	479	475	46	65	58	10	45	46	4	18	22
8	Okhamandal	..	T	546	1,338	1,445	95	294	234	77	252	257	71	254	205
			R	96	319	315	14	58	44	13	41	52	6	18	10
			U	450	1,219	1,130	81	236	190	64	211	205	65	236	195
9	Kalyanpur*	..	R	531	1,903	1,782	86	374	374	47	235	221	15	251	161
10	Khambhalia	..	T	763	2,502	2,458	179	700	671	130	541	513	93	420	401
			R	438	1,509	1,465	101	448	416	46	173	210	21	92	106
			U	325	993	993	78	252	255	84	368	303	72	328	295
11	Bhanvad	..	T	481	1,624	1,546	105	392	390	57	197	220	37	149	135
			R	358	1,254	1,186	70	280	275	32	111	121	13	48	41
			U	123	370	360	35	112	115	25	86	99	24	101	94

CHAPTER IV

AGRICULTURE AND IRRIGATION

AGRICULTURE

Agriculture has been, and is the most important economic activity of the majority of the people in the district. It has assumed great significance in the context of the urgent need for stepping up production with a view to achieving self-sufficiency in food.

According to the 1961 Census, 59·99 per cent of the total working population of the district was engaged in agriculture. This was much lower than the State figure which was 68·09 per cent. The break-up of persons engaged in agriculture in the district in 1961 was as follows.

Persons Engaged in Agriculture

	Total	Males	Females
As cultivators	165,237	105,449	59,788
As labourers	19,161	11,541	7,620
Total	**184,398**	**116,990**	**67,408**

Source :
District Census Handbook 1961, Jamnagar, p. 22

The statement given above indicates that of the total number of persons engaged in agriculture, 165,237 or 89·61 per cent were cultivators and only 19,161 or 10·39 per cent were agricultural labourers. These figures compare favourably with the figures for the State as a whole, where the cultivators accounted for 78·31 per cent of the total engaged in the cultivation of land and 21·69 per cent as agricultural labourers. The agricultural labourers belong mainly to such castes as Koli, Ahir, Harijan and other Backward Classes. The talukawise break-up of persons engaged in agriculture both as cultivators and as labourers given in Statement IV·1 appended at the end of the Chapter shows that the proportion of agricultural labourers to the total agricultural workers was the highest (17·65 per cent) in Jamjodhpur taluka and the lowest (5·36 per cent) in Khambhalia taluka.

Besides agriculture, a number of allied occupations provided livelihood to a large number of people, as seen from the following table.

Population Engaged in Allied Agricultural Operations, 1961

Allied agricultural occupations	Total number	Males	Females
Field produce and plantation crops ..	1,585	1,032	553
Forestry and logging	254	145	109
Fishing	1,164	1,142	22
Livestock and hunting	12,145	9,436	2,709

Source:

District Census Handbook 1961, Jamnagar, p. 36

Among the occupations ancillary to agriculture, livestock claims the largest number. Field produce and plantation crops come next, fishing being equally important owing to the proximity of the district to sea.

Land Utilisation

Land utilisation statistics are helpful in finding out the various uses to which land is put and bring out the extent of development of agriculture in the district. A proper utilisation of land resources thus assumes a major role in any programme of economic planning in a predominantly agricultural country like India. Information about the classification of land area in the district for the years 1956-57, 1960-61, and 1964-65 is given below.

STATEMENT IV.2

Land Utilisation

(AREA IN '00 SQ. KM.)

	1956-57*		1960-61*		1964-65†	
	Area	Percentage of total area	Area	Percentage of total area	Area	Percentage of total area
1	2	3	4	5	6	7
Reporting area for land utilisation purpose	9,377	100.00	10,108	100.00	10,412	100.00
1 Area under cultivation ..	5,570	59.40	5,681	56.20	5,726	54.99
2 Area other than cultivation	3,807	40.60	4,427	43.80	4,686	45.01
(i) Culturable waste, permanent pastures and other grazing lands ..	858	9.15	1,167	11.55	1,145	11.00
(ii) Others, i.e., forest, barren and unculturable land, land put to non-agricultural uses, etc. ..	2,949	31.45	3,260	32.25	3,541	34.01

NOTE

The figures for the year 1956-57 are for the areas of the district as constituted then and known as Halar district. Those for the year 1960-61 relate to Jamnagar district formed after the inclusion of Okhamandal taluka of Amreli district in 1959.

Source :

**District Census Handbook* 1961, Jamnagar, p. 22

†Director of Agriculture, Gujarat State, Ahmedabad

Exact comparison of land utilisation is not possible because of changes in the territorial jurisdiction of the district as also in the system of classification adopted for land utilisation. Nevertheless certain broad features are clearly evident. Area under cultivation in terms of percentage of the total reporting area for land utilisation purpose declined from 59·40 per cent in 1956-57 for the district as constituted then, to 54·99 per cent in 1964-65 due to the transfer of Okhamandal from Amreli to this district in 1959. The total area under cultivation, however, registered an increase of 2·8 per cent from 557,000 km. in 1956-57 to 572,600 km. in 1964-65, for the same reason. Whereas cultivable waste, permanent pastures and other grazing lands have increased from 9·15 per cent to 11·00 per cent during the same period, land classed as others which include forests, barren and uncultivable land, land put to non-agricultural use, etc., account for 31·45 per cent in 1956-57 as against 34·01 per cent in 1964-65.

IRRIGATION

Jamnagar district is a low rainfall area, the annual average being less than 20 inches (51 cm.). Crop failures owing to irregularity of monsoon have, therefore, become a common feature. The district is deficient in irrigation facilities, with the result that in 1961-62 only 4·94 per cent of its cropped area was under irrigation as against 7·84 per cent for the State. But owing to various facilities for irrigation which are being provided by the Government, the percentage of land under irrigation increased to 6·35 in 1964-65. The main source of irrigation is wells. The former Nawanagar State, encouraged the digging of wells by the cultivators since 1918 by giving a subsidy of Rs. 125 for sinking *pucca* wells in their holdings. Canals and tanks, wherever available, are other sources of irrigation.

In canals and tanks water is had mostly by gravitational flow, while in the case of wells by water lifts. *Kos* or *mots* and other water lifting devices are for the most part manually operated. Increasing use of oil and electric power, however, is made by the cultivators in the district for lifting and pumping water for irrigation purposes. These devices are proving more economic and easy to handle in the long run, though the initial capital expenditure involved in the purchase of an oil-engine or an electric motor and pump is quite large. Intervals of irrigation may vary from crop to crop Paddy and sugar-cane need watering at intervals of three to four days, while wheat, carrot, onion, etc., need it at a wider interval. Usually between 1·5 acre-inches to 2 acre-inches of water is required for irrigation (an acre—inch approximately measures 3,450 cubic feet or 101 tons of water).

The following statement shows the sources of water supply and area irrigated in the district during 1964-65.

STATEMENT IV.3

Sources of Water Supply and Area Irrigated, 1964-65

		Government canals		Wells (in number)		
Sl. No.	Taluka	Number	Mileage	Masonry	Non-masonry	Total
1	2	3	4	5	6	7
	District total	**16**	**103**	**20,221**	**14,193**	**34,414**
1	Okhamandal	1	2	600	..	600
2	Kalavad	4	21	1,742	1,426	3,168
3	Jamnagar	2	40	2,995	2,394	5,389
4	Khambhalia	7	34	2,078	2,064	4,142
5	Jamjodhpur	..	..	2,190	1,412	3,602
6	Dhrol	..	..	1,155	1,047	2,202
7	Kalyanpur	..	..	3,410	2,556	5,966
8	Jodiya	..	..	1,453	689	2,142
9	Bhanvad	..	..	2,557	1,781	4,338
10	Lalpur	2	6	2,041	924	2,965

			Net area (in hectares) irrigated by			
Sl. No.	Taluka	Tanks (in number)	Government canals	Tanks	Wells	Total
1	2	8	9	10	11	12
	District total	**103**	**1,701**	**41**	**35,589**	**38,331**
1	Okhamandal	..	..	..	387	387
2	Kalavad	2	38	..	4,998	5,036
3	Jamnagar	12	332	41	4,834	5,207
4	Khambhalia	10	737	..	4,414	5,151
5	Jamjodhpur	7	..	..	6,813	6,813
6	Dhrol	..	..	..	1,583	1,583
7	Kalyanpur	18	..	..	7,025	7,025
8	Jodiya	28	..	..	1,292	1,292
9	Bhanvad	10	..	..	2,782	2,782
10	Lalpur	16	594	..	1,461	2,055

Source :

Director of Agriculture, Gujarat State, Ahmedabad

92·85 per cent of the total irrigated area is under well irrigation. Kalyanpur taluka had the largest number of wells, followed by Jamnagar, Bhanvad, Khambhalia, Jamjodhpur and Kalavad in order. Next in importance is irrigation through canals managed by Government that accounts for 4·44 per cent of the total irrigated area. Khambhalia taluka had the largest area under canal irrigation followed by Lalpur and Jamnagar talukas.

IMPORTANT IRRIGATION PROJECTS

The former Nawanagar State had started a number of irrigation schemes by erecting dams and *bundhs* of which the following deserve mention.

	Scheme	Irrigation potential (in hectares)
1	Adhia in Atkot taluka	643
2	Hansthal in Khambhalia taluka	81
3	Vijarkhi in Panchkoshi taluka	429
4	Keshia in Jodiya taluka	20

Besides these tanks, canals at Dhudkot and Atkot (Budhanpuri) were used for irrigating crops whenever water was sufficient. The Government of Saurashtra realising the importance of irrigation in raising yield and combating the adverse effects of recurrent famines and scarcity, started 4 irrigation projects in the district. These construction of dam on the river Ghee at Khambhalia, Vedmati Dam, Sasoi Dam, and Puna Dam with a total irrigation potential of 6,192 hectares. The Sasoi scheme originally started by the Nawanagar State, but abandoned later was redesigned by the Saurashtra Government and implemented. Besides these, 8 minor irrigation projects, with an irrigation potential of 3,855 hectares were also undertaken.[1]

No new schemes of irrigation were undertaken after the integration of Saurashtra with the Bombay State in 1956. Irrigation has been greatly encouraged by the Gujarat State since its formation in 1960, and three more projects, viz., the Vartu, Sapda and Balmadi irrigation projects were undertaken in this district. The following are the particulars of the various irrigation projects in operation in the district.

1. VAKIL, C. N., and LAKDAWALA, D. T., *Economic Survey of Saurashtra* (Bombay), 1953 pp. 63-66

STATEMENT IV.4

Medium and Minor Irrigation Schemes

Sl. No.	Name of the scheme	Location of the project	Year of starting cons-truction	Year of comple-tion	Type	Size (in metres)			Cost of constru-ction (in lakhs of Rs.)	Storage capacity (in M-cubic metres)	Total estimated irrigation potential (in hectares)
						Length	Maxi-mum height	Top width			
1	2	3	4	5	6	7	8	9	10	11	12
	MEDIUM SCHEMES										
1	Sasoi Irrigation Scheme	Near village Piple of Lalpur taluka ..	1952	1954	Earthern	3,767.3	15.0	4.9	84.06	51	3,764
2	Puna Irrigation Scheme	Near village Navagam of Lalpur taluka ..	1952	1953	"	1,432.6	12.0	4.9	16.82	14	607
3	Ghee Irrigation Scheme	On Trumbay hill in Khambhalia taluka ..	1950	1953	"	1,036.3	12.0	4.9	22.59	14	1,416
4	Fulzar Irrigation Scheme	Near village Dudhala in Kalavad taluka ..	1956	1957	"	1,627.4	25.9	4.7	41.33	15	1,821
5	Vartu Irrigation Scheme	Near village Morzar in Bhanvad taluka ..	1961	1966	"	1,920.2	22.9	4.9	45.37	13	2,610
6	Sapda Irrigation Scheme	Near village Sapda in Jamnagar taluka ..	1960	1963	"	1,828.8	20.4	3.7	17.72	7	973

MINOR SCHEMES

1	Venu Irrigation Scheme	Near village Kadbal of Jamjodhpur taluka ..	1955	1958	,,	1,225.3	55	16	12.00	8	878
2	Bahmadi Irrigation Scheme	Kalavad taluka ..	1960	1966	,,	2,621	17	4	18.44	8	1,109
3	Dandawada Irrigation Scheme	Near village Beh in Khambhalia taluka ..	1955	1958	,,	1,372	12	4	9.70	5	486
4	Sinhan Irrigation Scheme	On river Sinhan in Khambhalia taluka ..	1950	1951	,,	488	13	5	8.50	10	506
5	Hansthal Irrigation Scheme	Khambhalia taluka ..	N. A.	1902	,,	152	9	5	2.00	4	243
6	Vijarkhi Irrigation Scheme	Near village Vijarkhi in Jamnagar taluka ..	N. A.	1902	,,	1,311	11	5	3.00	6	162
7	Vedmati Irrigation Scheme	Near village Datrana in Khambhalia taluka ..	1949	1952	,,	655	11	4	5.70	3	243

N. A.=Not available

Source :

1. Executive Engineer, Irrigation, Jamnagar
2. Executive Engineer, Panchayat Division, Jamnagar

All the 13 projects have now been completed, raising the total irrigation potential in the district to 14,818 hectares. Of these six an irrigation potential of 11,192 hectares are medium projects, while the remaining seven with an irrigation potential of 3,626 hectares are minor.

Medium Projects

Sasoi Irrigation Scheme—The scheme, originally taken up by the former Nawanagar State in 1945 but subsequently abandoned, was redesigned by the Saurashtra Government and taken up in 1952 and completed in 1954. The scheme comprised construction of a storage reservoir and canal works for irrigating land in and around Jamnagar taluka. The dam is an earthen one, with a total length of 3,767·3 metres, a maximum height of 15 metres and a top width of 4·9 metres. It has a storage capacity of 51 million cubic metres and an irrigation potential of 3,764 hectares.

Ghee Irrigation Scheme—The scheme was completed in 1953. The earthen dam has a total length of 1,036 metres, a maximum height of about 12 metres, and a top width of 4·9 metres. It has a storage capacity of 14 million cubic metres and an irrigation potential of 1,416 hectares.

Puna Irrigation Scheme—The dam is situated about 5 km. west of Sasoi dam and was completed in 1953. It is an earthen dam with a length of 1,432·6 metres, a maximum height of 12 metres and a top width of 4·9 metres. It has a storage capacity of 14 million cubic metres and an irrigation potential of 607 hectares.

Fulzar Irrigation Scheme—The scheme consists of a storage reservoir and canal works. It was completed in 1957. The main dam is earthen having a length of 1,627·4 metres, a maximum height of 25·9 metres and a top width of 4·7 metres. The storage capacity of the reservoir is 15 million cubic metres and its irrigation potential 1,821 hectares.

Vartu Irrigation Project—The scheme comprising construction of a reservoir and canal works was completed in 1966. There is an earthen dam about 1,920·2 metres in length and 22·9 metres in height with a top width of 4·9 metres. It has a storage capacity of 13 million cubic metres and an irrigation potential of about 2,610 hectares of land.

Sapda Irrigation Project—The scheme comprising construction of a reservoir and canal works was completed in 1963. There is an earthen dam about 1.828·8 metres in length, with a maximum height of 20·4 metres and a top width of 3·7 metres. It has a storage capacity of 7 million cubic metres and an irrigation potential of 973 hectares.

AREA IRRIGATED

Irrigation, where feasible, plays an important role in crop cultivation. Information about area under cultivation and area irrigated for certain selected years is given below.

(AREA IN '00 HECTARES)

	1952-53	1956-57	1960-61	1964-65
1	2	3	4	5
Total area cultivated	4,999	5,642	5,780	5,726
Total area irrigated	411	244	302	376
Percentage of irrigated area to total cultivated area	8.22	4.32	5.23	6.57

The area under irrigation declined from 8·22 in 1952-53 to 4·32 in 1956-57 due to the irregularity of rains. But thereafter it rose to 5·23 per cent in 1960-61 and to 6·57 per cent in 1964-65.

SOIL EROSION

Soil erosion is a process in which absorptive top soil is removed by rain water or wind, making it difficult for rain water to penetrate the less saturated layers. Erosion by wind occurs in coastal areas of the district. Denudation of various areas due to ruthless cutting and grazing also has led to soil erosion. Under natural conditions, the top soil is protected by vegetation which when removed results in soil erosion. To arrest soil erosion, systematic execution of soil conservation schemes for increased agricultural production assumes vital importance. Various schemes of soil conservation have been undertaken in the district under the supervision of the Sub-Divisional Soil Conservation Officer, Jamnagar since 1956-57. Important among them is contour bunding under which a total area of over 22,000 hectares was bunded during the Second and the Third Plan periods at a total cost of over Rs 20 lakhs. The following statement shows yearwise progress in this respect.

Contour Bunding, 1956-57 to 1965-66.

Year	Area of land bunded in hectares	Cost incurred in Rs.	Year	Area of land bunded in hectares	Cost incurred in Rs.
1	2	3	1	2	3
1956-57 ..	397	6,548.00	1962-63 ..	3,126	295,254.00
1957-58 ..	1,668	78,000.00	1963-64 ..	2,757	341,877.00
1958-59 ..	1,671	94,804.00	1964-65 ..	2,[illegible]63	214,175.00
1959-60 ..	1,968	90,898.98	1965-66 ..	3,247	338,276.88
1960-61 ..	3,238	29[illegible],413.00			
1961-62 ..	1,742	247,016.60	**Total** ..	**22,087**	**2,002,381.46**

Source :

Sub-Divisional Soil Conservation Officer, Jamnagar

Land reclamation was responsible for reclaiming 7,687 hectares up to March, 1961 which increased to 8,182 hectares in 1965.

Reclamation of Khar Land

Construction of dams and bunds to reclaim khar lands had been undertaken by the former Nawanagar State. A major scheme, for which information is available, was the Jodiya-Balambha scheme. This scheme aimed at building a 34 km. long dam to reclaim about 8,498 hectares of *khar* land. The State had already built 27 km. of this dam and incurred an expenditure of about Rs. 20 lakhs out of the estimated expenditure of Rs. 27 lakhs. The scheme was revived by the Saurashtra Government and completed by the Bombay Government in 1957-58. 2,023 hectares of land have been fully reclaimed and 3,035 hectares partially till 1965-66. Among other such schemes, Khijadia, Dhunvav, Mota Asota and Sachana-Jamduna schemes aiming at reclaiming 1,861 hectares of land were completed by the Saurashtra Government, and the Hadiana-Dobar and Salaya schemes aiming at reclaiming 1,295 hectares of land by the Bombay Government.

Soils

As the geographical formation of Saurashtra is of volcanic origin, the soils are generally derived from trap rock. Soils found in Jamnagar district may broadly be classified as alluvial, black, light brown and alkaline. The black or medium black soil and the light brown soil may be termed as the main soils, while the other two, namely, the alluvial and the alkaline as subsoil of the district confined to smaller areas. While the medium black soil is rich in minerals and organic matter and, therefore, more fertile, the light soil is less fertile and needs plenty of water and manure for good harvest. The black or medium black soil is found in Dhrol, Kalavad, Jamjodhpur and Bhanvad talukas and eastern portion of Jamnagar taluka. It is generally 9 to 36 inches deep and covers approximately 289 thousand hectares. Light brown soil also called *dharod* is found in all talukas but mainly in the western parts of the district, viz., Khambhalia, Kalyanpur and Lalpur talukas and western portion of Jamnagar taluka. It is about 12 inches deep and covers about 528 thousand hectares of land in the district. The main crops grown on these soils are *jowar* and *bajri*. The alluvial soil also called *ghad, bhatha* or *katha* is found on the river bank near Jamnagar taluka and in Kalyanpur and Jodiya talukas. Though occupying a small area, it is the richest soil in the district, regularly strengthened by fresh deposition or sediments when the banks of river are overflown during high floods. The alkaline soil locally known as *khar* is found in the coastal areas and covers nearly 75 thousand hectares of land in the district. Well or canal water is generally unsuitable for this tract.

Agricultural Holdings

The size of agricultural holding influences agricultural production. Use of scientific methods of cultivation and optimum production are facilitated in large size holdings. On the other hand, uneconomic holdings tend to raise the unit cost of production, and constitute a serious obstacle to agricultural improvement. The existence of fragmented holdings prevents economic and profitable cultivation of land and thus proves a major hindrance to high productivity in agricultural produce. The evil of fragmentation results from (a) the system of equal inheritance of land among all the sons of members of a family, and (b) alienation and sale of land for redemption of debts.

There was not much scope for increase in the number of dwarf holdings through splitting as the holders in alienated and Girasdari lands were tenants-at-will without the right to transfer to any other person. Such a condition prevailed also in respect of most of the *khalsa* lands held by the cultivators who did not enjoy full occupancy rights and transfer of land by sale, gift or will was not permitted. Even the right of inheritance and succession was of a limited nature. These restrictions operated as a wholesome check on large scale fragmentation of holdings which was the rule in the neighbouring areas of Bombay. Under the circumstances, while subdivision of holdings resulting in fragmentation though not totally absent was quite appreciable in the princely areas. The Government of Saurashtra, therefore, decided after collecting relevant data for *khalsa* and non-*khalsa* areas to take appropriate measures to put an end to further fragmentation. It laid down various sizes of economic holdings in different districts according to the nature and fertility of soil. These and other measures aiming at restricting fragmentation and consolidation of holdings are described in Chapter X—Revenue Administration

The economic holdings[1] for Jamnagar district were fixed as follows.

	(IN ACRES)
(a) Jamjodhpur Taluka and Amran Chovishi of Jodiya taluka	32
(b) Kalavad Taluka	36
(c) Rest of the district	40

The area of an economic holding thus differs in different regions according to the nature of soil, climate and crops raised. The following

1. An economic holding may be defined as one which maintains an average cultivating family and is also sufficient enough in area to keep the cultivator and a pair of bullocks fully employed.

statement gives the size of land holding and the number of Khatedars as in 1961 and 1966.

STATEMENT IV.5

Size of Land-holdings, 1961 and 1966

Size of land-holdings (in hectares)	No. of holders		Percentage to total holders		Area held (in hectares)		Percentage to total area held	
	1961	1966	1961	1966	1961	1966	1961	1966
1	2	3	4	5	6	7	8	9
Total ..	**63,307**	**71,252**	**100.00**	**100.00**	**515,046**	**617,428**	**100.00**	**100.00**
Up to 2 ..	6,922	8,419	10.90	11.81	12,425	9,675	2.41	1.57
Over 2 to 6 ..	17,082	21,161	27.00	29.70	57,642	87.777	11.19	14.22
Over 6 to 10 ..	18,863	18,579	29.80	26.08	152,354	152,872	29.58	24.76
Over 10 to 40	20,317	22,970	32.10	32.24	284,120	357,562	55.17	57.91
Over 40 ..	123	123	0.20	00.17	8,505	9,542	1.65	1.54

Source :

1. *District Census Handbook* 1961, Jamnagar, p. 8
2. Collector, Jamnagar

Figures for 1961 have been extracted from the *District Census Handbook* and those for 1966 have been furnished by the Revenue Department. The statement aforesaid reveals a general agreement between these two sets of figures except for a slight variation here and there which is appreciable only in respect of the percentage of holders to the total occupying 6 to 10 hectares. It is significant to note that nearly one-third of the holders in the range 10 hectares and above possess about 60 per cent of the total cultivable land in the district and are in possession of holdings which can be termed economic. Moreover about 12 per cent of the holders are in occupation of land below 2 hectares which is only 1½ per cent of the cultivable area. These statistics disclose on the whole a lesser degree of fragmentation of holdings compared to other parts of the State owing to the general policy of the former rulers who had not conferred full occupancy rights on the peasants, while those who had granted such rights had restricted them by prohibiting the transfer of land either by mortgage, sale or gift. Even the right of inheritance and succession where conferred was limited to the direct male issue.

Cropping Pattern

Area under different crops during 1952-53, 1956-57, 1960-61 and 1964-65 were as follows. Talukawise figures for 1964-65 are given in the statement appended at the end of the Chapter.

STATEMENT IV.6

Area Under Different Crops for the Year 1952-53, 1956-57, 1960-61 and 1964-65

(IN '00 HECTARES)

Sl. No. 1	Crops 2	1952-53* 3	1956-57* 4	1960-61* 5	1964-65† 6
1	Rice	32	22	28	19
2	Wheat	168	233	138	157
3	*Jowar*	1,690	1,288	1,081	1,197
4	*Bajri*	1,690	1,236	784	846
5	Other cereals	N. A.	38	..	8
	Total cereals	*3,580*	*2,817*	*2,031*	*2,227*
6	Gram	98	58	10	8
7	Other pulses	..	17	18	8
	Total pulses	*98*	*75*	*32*	*16*
8	Sugar-cane	9	16	19	51
9	Potatoes	N. A.	4	1	1
10	Fruit and vegetables excluding potatoes	N. A.	12	13	15
11	Condiments and spices	N. A.	52	45	40
12	Other food crops	..	1	..	..
	Total food crops	*3,687*	*2,977*	*2,141*	*2,350*
13	Groundnut	901	2,062	3,229	3,123
14	Sesamum	256	143	58	85
15	Castor-seeds	115	145	15	9
16	Lin-seeds	..	4	..	..
17	Other oil-seeds	..	15	7	1
	Total oil-seeds	*1,272*	*2,369*	*3,309*	*3,217*
18	Cotton	40	241	277	236
	Total fibres	*40*	*241*	*277*	*236*
	Total drugs and narcotics	..	*14*	..	8
19	Other non-food crops	..	41	53	66
	Total non-food crops	*1,312*	*2,665*	*3,639*	*3,527*
	Total area under crops	**4,999**	**5,642**	**5,780**	**5,877**

N. A.=Not available

Source :

* *District Census Handbook* 1961, Jamnagar, p. 173

†Director of Agriculture, Gujarat State, Ahmedabad

STATEMENT IV.7

Percentage of Area Under Different Crops During 1956-57 1960-61 and 1964-65

Sl. No.	Crops	1956-57*	1960-61*	1964-65†
1	2	3	4	5
1	Rice	0.39	0.48	0.32
2	Wheat	4.13	2.40	2.68
3	*Jowar*	22.81	18.70	20.36
4	*Bajri*	21.00	13.57	14.40
5	Other cereals	0.67	0.01	0.13
	Total cereals	*49.90*	*35.16*	*37.89*
6	Gram	1.03	0.28	0.13
7	Other pulses	0.29	0.28	0.14
	Total pulses	*1.32*	*0.63*	*0.27*
9	Sugar-cane	0.29	0.32	0.36
9	Potatoes	0.07	0.01	0.02
10	Fruits and vegetables excluding potatoes	0.21	0.22	0.26
11	Condiments and spices	0.92	0.77	0.88
12	Other food crops	0.09	..	..
	Total food crops	*52.80*	*37.04*	*39.98*
13	Groundnut	36.53	55.87	53.12
14	Sesamum	2.52	1.01	1.44
15	Castor-seeds	2.57	0.25	0.16
16	Lin-seeds	0.08	..	..
17	Other oil-seeds	0.27	0.11	0.02
	Total oil-seeds	*41.97*	*57.24*	*54.74*
18	Cotton	4.26	4.80	4.02
	Total fibres	*4.26*	*4·80*	*4.02*
	Total drugs and narcotics	*0.25*	*0.01*	*0.14*
19	Other non-food crops	0.72	0.01	0.12
	Total non-food crops	*47.20*	*62.96*	*60.02*
	Total area under crops	**100.00**	**100.00**	**100.00**

Source :

* *District Census Handbook* 1961, Jamnagar, p. 22

† Director of Agriculture, Gujarat State, Ahmedabad

During the period under review there was an appreciable decrease in the percentage of area under food crops. From 52·80 per cent in 1956-57 it declined to 37·04 per cent in 1960-61, but improved somewhat in 1964-65 by returning 39·98 per cent. Percentage of area under non-food crops showed a corresponding increase and rose from 47·20 per cent in 1956-57 to 62·96 per cent in 1960-61, with a slight variation (60·02 per cent) in 1964-65. The largest area under non-food crops was accounted for by groundnut which claimed more than 50 per cent of the total area under different crops. Cotton has more or less remained steady around 4 per cent. *Jowar* occupied the first place among food crops and varied between 22·81 per cent and 20·36 per cent. The decline, however, in the acreage under *bajri* was significant and ranged between 21·90 per cent and 14·40 per cent.

Area irrigated under different crops during 1952-53, 1956-57, 1960-61 and 1964-65 were as follows.

STATEMENT IV.10

Area Irrigated by Crops

(IN '00 HECTARES)

Sl. No.	Crops	1952-53*	1956-57*	1960-61*	1964-65†
1	2	3	4		
	FOOD CROPS				
1	Rice	25	20	28	19
2	Wheat	114	136	90	78
3	*Jowar*	8	7	8	10
4	*Bajri*	20	2	3	15
5	Maize	1	..	..	1
6	Gram	..	3	..	2
7	Sugar-cane	6	16	18	51
8	Potatoes	N. A.	4	1	1
9	Chillies	N. A.	17	12	8
10	Other food crops	4	16	65	48
	Total food crops	*178*	*221*	*225*	*242*

STATEMENT IV.10—*contd.*

Sl. No.	Crops	1952-53*	1956-57*	1960-61*	1964-65†
1	2	3	4	5	6
	NON-FOOD CROPS				
11	Cotton	..	1	50	75
12	Groundnut	N. A.	..	..	3
13	Fodder crops	N. A.	7	23	54
14	Other non-food crops	N. A.	14	4	2
	Total non-food crops	233	22	77	134
	Total area under irrigated crops ..	411	248	308	376

N. A.=Not available

Source :

**District Census Handbook* 1961, Jamnagar, p. 175

†Director of Agriculture, Gujarat State, Ahmedabad

Considering the area irrigated under different crops it is seen that area under food crops increased continually during 1952-53 to 1964-65 revealing the necessity of increased food production to ease the food situation. Between 1952-53 and 1956-57 the area under food crops increased by 4,300 hectares as against 2,100 hectares between 1956-57 and 1964-65.

On the other hand area under non-food crops between 1952-53 and 1956-57 declined from 23,300 hectares to 2,200 hectares but rose to 13,400 hectares in 1964-65 owing to the increasing preference on the part of cultivators for cash crops which are more remunerative than food crops. Among the food crops wheat had the largest acreage followed by sugar-cane and *jowar* in order. Among the non-food crops cotton and fodder crops had the largest acreage. Area of food crops and non-food crops irrigated, by taluka are given in Statements IV·11 and IV·12 at the end of the Chapter.

In 1961-62 the cultivated area of the district formed 5·8 per cent of the cultivated area of the State against 4·01 per cent of the total population of the State. But the contribution made by the district in foodgrains production has remained comparatively less as is evident from the outturn of crops discussed below.

OUTTURN OF CROPS

The outturn of principal crops in the district during the period 1952-53 to 1964-65 are given in the following statement.

STATEMENT IV.13

Outturn of Principal Crops for the Years 1952-53, 1956-57, 1960-61 and 1964-65

(IN TONNES)

Sl. No.	Crops	1952-53*	1956-57*	1960-61*	1964-65†
1	2	3	4	5	6
1	Rice	2,337	1,727	2,235	1,727
2	*Jowar*	15,952	21,235	7,417	14,326
3	*Bajri*	19,102	30,380	25,604	46,230
4	Wheat	12,497	15,952	9,754	15,647
5	Gram	1,829	1,626	102	406
6	Sugar-cane	4,877	9,652	11,481	35,460
7	Chillies	..	813	1,016	711
8	Groundnut	26,112	149,054	139,402	239,990
9	Sesamum	2,236	1.321	508	1,219
10	Cotton	17	159	121	248

NOTE :
Production of cotton is in hundred bales of 178 kg. each.

Source :
**Statistics of area, production and yield per acre of principal crops in Gujarat State for the period 1949-50 to 1963-64*, Director of Agriculture, Gujarat State, Ahmedabad, 1965

†Director of Agriculture, Gujarat State, Ahmedabad

The principal crops in which the outturn during the last two decades is noteworthy are groundnut, sugar-cane and cotton, wherein the yield has gone up five to ten times. In the rest of the crops there is no significant change except for minor fluctuations owing to the vagaries of monsoon on the one hand and increasing preference for money-crops on the other. It is also noteworthy that the contribution of the district to the overall production of foodgrains in the State was comparatively much less, being 2·41 per cent in 1960-61, 1·93 per cent in 1961-62, and 0·29 per cent in 1963-64. This decline may very well be attributed to the lesser fertility of soil, the barren coastal areas resulting in lower yield, irregularity of rains and recurrent periods of scarcity.

The yield per hectare of principal crops for the years 1952-53, 1956-57, 1960-61 and 1964-65 had been as follows.

STATEMENT IV.14

Yield per Hectare in kg. of Principal Crops for the Years 1952-53, 1956-57, 1960-61 and 1964-65

Sl. No.	Crops	1952-53*	1956-57*	1960-61*	1964-65†
1	2	3	4	5	6
1	Rice	731	790	800	921
2	*Jowar*	94	166	68	110
3	*Bajri*	113	215	326	546
4	Wheat	745	685	705	995
5	Gram	186	279	63	541
6	Sugar-cane	5,210	5,963	6,168	7,005
7	Chillies	..	467	897	870
8	Groundnut	200	723	431	760
9	Sesamum	88	93	88	140
10	Cotton	76	117	78	166

Source :

**Statistics of area production and yield per acre for principal crops in Gujarat State for the period 1949-50 to 1963-64*, Director of Agriculture, Gujarat State, Ahmedabad, 1965

†Director of Agriculture, Gujarat State, Ahmedabad

Kharif and Rabi Crops—Crops grown in the district fall into two main categories, viz., the Kharif and the Rabi. The Kharif or the rain-fed crops are sown in monsoon after the first rainfall in June-July and harvested usually in October-November. The Rabi or irrigated crops are usually sown in September-October and harvested in February or March. The main Kharif crops in the district are *jowar*, *bajri* and groundnut, though rice is recently grown where facilities for irrigation are available. Wheat and gram are the main Rabi crops. *Jowar* and cotton can be grown both as Rabi and Kharif crops. Kharif crops being the principal crops always occupy a much larger area as compared to Rabi. The acreage under these two types of crops varies from year to year depending upon the rainy season and irrigation facilities which are limited. In 1963-64 Kharif crops occupied over 90 per cent of the area under total crops.

MODE OF CULTIVATION OF PRINCIPAL CROPS

Cereals

Jowar—*Jowar* (Indian millet) is an important cereal crop occupying the largest area under food crops and grown all over the district in all types of soils and climatic conditions. It covered 119,678 hectares that constituted nearly 50·9 per cent of the total area under food crops in 1964-65. Its total production during the year was 14,326 tonnes. It is mainly a Kharif crop, though it is grown also as a Rabi crop. It is cultivated mainly in Kalyanpur and to some extent in Jamnagar taluka. The crop is grown for a dual purpose, i. e., for grain and fodder, the more important being grain. The local or *deshi* and improved varieties of *jowar* are usually cultivated. The field is prepared during April or May and sowing operations start just after the first rainfall which is usually in June or July, if it is grown as a kharif crop. The distance between the rows is generally about 50 cm. Usually one inter-culturing after a month of the sowing is required. Flowering and grain formation start in the beginning of September and harvesting takes place generally from the second week of October and may sometimes continue till November. The crop is cut by sickle and exposed to the sun for about three days. The earheads are then cut and carried to the thrashing floor where it is thrashed under bullock's feet.

Bajri—*Bajri* (Spiked millet) is another important cereal grown in various types of soils ranging from sandy loam of Kalyanpur to medium black of Kalavad, Jamjodhpur and Jodiya. It covered 123,632 hectares in 1956-57, which declined to 84,607 hectares in 1964-65. It covered during 1964-65 nearly 36 per cent of land under food crops. Its production increased from 30,380 tonnes in 1956-57 to 46,230 tonnes in 1964-65. A new variety of *bajri* called the Jamnagar Giant was evolved by crossing the *deshi* variety with the African variety and introduced by the former Nawanagar State. But it has now been discontinued as the local *deshi* variety has been found to give a greater yield than any other variety. With a view to increase the outturn of *bajri*, use of hybrid *bajri* seeds evolved by crossing the local variety with the American variety is being encouraged. In 1965-66 it covered 40 hectares.

The land is tilled in April or May. Sowing takes place after the first good rainfall by local *dantal* with a spacing of 22 to 25 cm. between the rows. The crop is generally not manured or watered. Two inter-culturings are done at an interval of one month after sowing. Flowering and grain formation generally start in early September and harvesting in the second week of October. The harvested crop is kept in the field for a few days and carted to the thrashing floor where it is pounded under bullock's feet.

Cultivators usually keep a major part of the produce for their own use and for seed purposes and sell the remainder, if any, in the open market.

Wheat—Wheat is a Rabi crop grown all over the district but more extensively in Dhrol and Jodiya talukas. It was cultivated in 15,729 hectares of land in 1964-65, and its production was 15,647 tonnes. The *popatia* and red varieties of wheat are usually grown. It has been found that the yield from the improved N. P. 798 type of wheat is from 50 to 80 per cent more without any danger of its being afflicted by a blight named *geru* (*puccima graminis trici*) which stops the growth of the seed, and in some cases destroys it. Wheat grows in black soil. Shallow lands are not particularly suited to it. It is both an irrigated as well as a dry crop. The yield of unwatered wheat is comparatively less but commands a slightly higher price.

Land is prepared for the crop in July or August. Farm manure at the rate of about 25 cartloads per acre is then spread in the fields. Sowing starts usually after Dassera in October and is continued till the first week of November. Inter-culturings are generally given when the crop is an irrigated one The irrigated crop is given top dressing in the form of manure mixture after one month of sowing. Ears come in January and harvesting is started in February and continued till March.

Paddy—Paddy or rice is not grown vary extensively in the district. Area under it has declined from 2,792 hectares in 1960-61 to 1,876 hectares in 1964-65. Its production during the same period has also declined from 2,235 tonnes to only 1,727 tonnes due to vagaries of monsoon. Its cultivation is confined to areas comprising Jamnagar, Kalyanpur and Kalavad talukas where the medium black soil is conducive to its growth. It requires good irrigation facilities and a fairly deep soil. The field is prepared after Rabi crops are harvested. Preparatory tilling is done in April-May. Sowing starts usually in July mostly at 45 cm. distance. Irrigation is restored to usually at an interval of 10 days. Flowering begins in early September and grain formation starts at the end of the month. Harvesting start· in mid-October and continues till mid-November.

Pulses- Pulses are generally not grown alone as a single crop but are mixed with *jowar* or *bajri* and at times with sugar-cane. The percentage of area under pulses has gradually declined from 1·32 per cent of the total cropped area in 1956-57 to 0·27 per cent in 1964-65. Area under pulses covered 1,587 hectares in 1964-65 and constituted 0·68 per cent of the total area under food crops. 610 tonnes of pulses were grown during that year The important pulse crops grown are gram (chana), green gram (*mag*), and *math*.

OIL-SEEDS

Oil-seeds grown in the district are groundnut, sesamum, castor, etc. Of these, groundnut is the most important. Area under oil-seeds increased from 236,961 hectares in 1956-57 to 321,701 hectares in 1964-65 when it accounted for 54·74 per cent of the total cropped area.

Groundnut—Mandvi or *shing* (groundnut) is the most important cash crop in the district occupying the largest area under any single crop. Area under it gradually increased from 206,228 hectares in 1956-57 to 312,204 hectares in 1964-65 when it accounted for 53·12 per cent of the total area cropped. Its production from 149,054 tonnes in 1956-57 increased to 239,990 tonnes in 1964-65 due to adoption of improved methods of cultivation.

Kalavad, Jamjodhpur, Khambhalia, and Lalpur are the main groundnut producing talukas in the district. Two well-known varieties of groundnut are (i) the erect or bunch type locally called *mathadi* or *gini mandvi* or *ubhadi* and (ii) the spreading variety called *veldi* or *deshi* or *jadi mandavi*. The Punjab-I and AK-12-24 are the important varieties of groundnut grown. Farm yard manure, superphosphate and fish-meal are considered good manure for this crop. Groundnut crop being a cash crop gets the best cultivation and treatment. There would be many fields where this crop is grown consecutively over a number of years in the same furrow. It is a Kharif crop sown in the beginning of July and harvested in September-October. Harvesting is done mostly by harrows, but in some cases a plough is also used. The harvested crop is collected, heaped and thrashed with rakes. The pods, stalks and leaves are then separated by winnowing. The broken leaves are considered very useful as fodder. The groundnut crop on an average yields about 200 to 300 kg. of pods and 400 to 500 kg. of fodder per acre. The seeds by extraction yield edible oil which has multiple uses. Oilcake is given to cattle and quite a substantial part is used as manure after mixing it with chemical fertilisers.

Til or *Tal* (sesamum) is extensively grown in Kalyanpur, Jamnagar, Jodiya and Khambhalia talukas which accounted for more than two-thirds of the total area under this crop. It was cultivated in 8,475 hectares in 1964-65 and its outturn was 1,219 tonnes. *Til* is generally grown to increase the fertility of soil after cultivation of soil-exhausting crops like *jowar*. No manuring for this crop is generally required as the crop itself is considered to be fertility recuperating. It is grown both as a Rabi and Kharif crop. The Kharif crop is sown in July and harvested in October; the Rabi crop is sown in September-October and harvested in January. The plants after they grow yellow and cast off leaves are picked and stocked in the thrashing yard. After they become dry they are spread on a cloth, winnowed and cleaned.

Castor—Castor covered an area of 932 hectares in 1964-65, and its production was 203 tonnes. It was cultivated mainly in Kalyanpur, Okhamandal, Khambhalia, and Lalpur talukas.

Sugar-cane (*Sherdi*)—Though not an important crop, it is grown all over the district except Okhamandal. It is more extensively grown in Jamnagar and Jamjodhpur talukas which together accounted for nearly half the area under this crop. It covered an area of 5,067 hectares, and its production was 35,460 tonnes in 1964-65. The Coimbatore variety of sugar-cane is usually grown. It grows in black soil and is planted in February-March and cut at the end of a year. The soil is ploughed thrice, broken once, levelled twice, manured once at the rate of about 40 cartloads per acre and weeded four times. It requires to be irrigated all the year round. Harvesting starts from January of the next year and continues till March. Crushing of the sugar-cane which starts immediately thereafter for making *gur*, is done with iron cane crushers and in many cases by crushers run by power.

Cotton—Cotton is another important cash crop grown all over the district, but more extensively in Jodiya, Kalyanpur, and Jamjodhpur talukas which together accounted for more than 82 per cent of the total area under it and 4·02 per cent of the total cropped area during 1964-65. The *wagad*, *kalyan* and Co_2-170 varieties of cotton are usually grown. Medium black soil is conducive to its growth Sowing starts in July with a spacing of 45-90 cm. The crop usually begins to flower by the end of November and picking of cotton seeds starts in February and lasts till April.

Condiments and Spices—The main condiments grown are garlic and chilly Garlic (*lasan*) is cultivated mainly in Kalavad, Khambhalia, and Lalpur talukas. It is grown both as a Rabi and Kharif crop. It covered 3,123 hectares in 1964-65.

Chilly (*marcha*) is more extensively grown in Khambhalia and Kalyanpur talukas. It is chiefly a Kharif crop. It covered 838 hectares in 1964-65, and its productions was 711 tonnes.

Fruits and Vegetables—Cultivation of fruit crops is negligible. It covered only 334 hectares in 1964-65. The main fruits grown are mangoes, *papaiya*, bananas and *chikoo*.

The main vegetables grown in the district are potato, onion, brinjal, tomato, carrot, cabbage, sweet potato and lady's finger (*bhinda*). Leafy vegetables like *methi* and *tandaljo* are also grown on a restricted scale. The total area under vegetables was 1,333 hectares in 1964-65.

Potato—Jamnagar district is an important potato growing area in Saurashtra. Its cultivation in the district is done mainly in Jamnagar, Khambhalia and Kalavad talukas. It covered an area of 125 hectares in 1964-65, and yielded 813 tonnes. It is grown as a Rabi crop and is usually followed by *bajri*. The crop is planted in November-December. Sets of seed potato each having two to three eyebuds are sown in flat beds previously irrigated. The crop requires about eight to ten irrigations. Harvesting starts when plants turn yellow, usually in the month of February and continues till the middle of March.

Onion—*Dungli* or onion is mainly grown in Jamjodhpur, Jamnagar and Kalavad talukas. It covered an area of only 11 hectares in 1964-65. It is sown on raised seed beds in October-November. The seedings get ready after a month when they are transplanted at a distance of 10 to 13 cm. The crop is harvested between April-June. A large bulk of its cultivation is confined to the red variety only.

Drugs and Narcotics—Drugs and narcotics claimed in 1964-65, 805 hectares of which 718 were under *ajwan*.

Fodder—Fodder crops covered a total of 6,205 hectares of land in 1964-65.

Crop Calendar

The calendar of sowing and harvesting operations for important crops in the district is given in the following statement.

Sl. No.	Crops	Sowing period	Harvesting period
1	2	3	4
1	*Bajri*	June-July	October-November
2	*Jowar*	June-July	October-November
3	Wheat	October-November	February-March
4	Rice	June-July	November-December
5	Cotton	June-July (for Malvi) September-October (for Dholera)	October-November February-March
6	Sesamum	June-July (August-September late veriety)	September-October January-February
7	Groundnut	June-July	October-November
8	Sugar-cane	January-February and March	December-February

Source:

District Statistical Abstract Jamnagar, p. 55, 1960-61

Crop Prospects

The main crops of the districts are *jowar, bajri,* wheat, groundnut, and cotton. The distribution of rainfall in the district is uneven and varies from taluka to taluka and from year to year. The figures of frequency of the annual rainfall between 1901-1950 disclose that out of 50 years, 33 had rainfall below 500 mm. and 17 above it. Moreover besides poor fertility of soil, 45·38 per cent of the total geographical area of the district is claimed by area other than cultivation distributed equally between (i) cultivable waste, permanent pastures, grazing and fallow lands on the one hand and (ii) barren and non-cultivable land, and land put to non-agriculture use on the other. The only hope, therefore, of increasing production lies in land reclamation, intensive cultivation and adoption of better farming practices, coupled with irrigation on which the district is at present concentrating. There has been of late greater emphasis on the cultivation of cash crops which account for more than half of the total cultivated area in the district. Groundnut and cotton are important commercial crops which bring good returns to the farmer, whereas sugar-cane cultivation is receiving greater attention than before. Extensive cultivation of rice which is an irrigated crop is out of question owing to paucity of rains and poor fertility of soils. Wheat which is mostly an irrigated crop commands a limited area.

Progress of Scientific Agriculture

The agricultural implements are mostly of the traditional type, though mechanisation has made some headway in this district as elsewhere. The main implements used by the agriculturists include plough (*hal*) for ploughing or digging the land, harrow (*rapti*) for breaking the clods and levelling and seed-drill (*dantal*) for sowing.

Ploughing of fields is done mostly by ploughs (*hals*). *Jirayat* or rain-crop fields are generally twice ploughed, the second furrowing being cross-wise. The garden lands are generally ploughed three or four times, each ploughing being deeper than the one before. Ground which has been kept fallow is ploughed and cross-ploughed as soon as the first rain has moisted it. It is allowed to lie untouched till the next fall of rain, when it is again turned over more than once. Some of the progressive cultivators in the district have started using tractors for ploughing their fields. These numbered 94 in 1966. For a field under tillage it is generally enough to open the surface with the harrow (*kalia* or *rapti*). The harrow whose function it is to cut weeds does not, like the plough, leave rigid under-surface. The blade passes just below the surface with no other result than to loosen the earth. After it has been once harrowed and soaked with rain, the ground is thoroughly clearly of large stones, tree-roots, etc. The clod crusher (*samar*) which is a plank of

wood weighted by the cultivator driving it is then passed over the soil and the surface thoroughly smoothed. Finally, the soil is once more stirred with the harrow and is then considered ready for sowing. The seed is sown by the seed-drill (*dantal* or *vavania*) which is skilfully operated by the cultivator. The grain is poured in a wooden bowl at the top from which it runs down through narrow tapering cylindrical parts, three or four in number, into the soil.

Other agricultural implements used by cultivators include hoe (*beli*) for inter-culturing of crops, sickle (*datardi*) for harvesting, pick-axe (*kodali*) and share (*kosh*) for digging pits and spade (*pavda*) and wooden rake (*khampali*) for levelling the soil.

The following statement gives comparative figures of agricultural implements used in the district between 1951 and 1966.

Agricultural Implements in 1951 and 1966

	1951	1966
1	2	3
Plough ..	28,647	57,860
(i) Wooden	26,027	57,423
(ii) Iron	2,620	437
Carts ..	31,521	51,646
Sugarcane crushers	188	343
(i) Power	19	253
(ii) Bullocks	169	90
Oil-engines	781	12,302
Electric pumps	35	491
Tractors	..	94
Persian wheels or *rahats*	N. A.	160

N. A.=Not available

Source :

Bureau of Economics and Statistics, Gujarat State, Ahmedabad

The statement shows a great increase in the use of agricultural implements in the district since the implementation of the Five Year Plans. It also reflects the increased use of modern machineries and implements in agricultural work. The number of iron ploughs that stood at 2,620 in 1951 declined to a mere 152 in 1956, and rose to 437 in 1966. Power-run sugar crushers increased from 19 in 1951 to 253 in 1966, oil-engines from 781 to 12,302; electric pumps from 35 to 491, and tractors from nil to 94 during the same period.

SEED SUPPLY

The usual practice with many of the cultivators in the district is to select good earheads and preserve them for seed purposes. Some obtain their seeds from co-operative societies which supply improved varieties of seeds recommended by the Government. The rest obtain their requirements from the well-to-do farmers or from local grain merchants, either on cash payment or barter system.

Before the implementation of the First Five Year Plan, it was the local trader who supplied all the requirements of the cultivators including seeds. The former Nawanagar State evolved an improved variety of hybrid *bajri*, known as Jamnagar Giant. This variety has now become out of date. There was no seed-multiplication farm in the district with the result that cultivators did not have much opportunity to improve the quality of their produce. The Government of Saurashtra started experimenting in this direction in 1952, when some selected varieties of groundnut and wheat were tried by the Agricultural Research Centre at Jamnagar and then distributed to the cultivators. Since then various experiments are conducted at the Centre, and improved varieties of seeds are multiplied for distribution to the cultivators. During the First Plan period two seed multiplication farms one each at Jamnagar and Aliya-Bada were established Later on two more farms one each at Jamjodhpur and Lalpur were added. At present there are 10 seed multiplication farms run by Government at Jamnagar, Bhanvad, Kalavad, Jodiya, Kalyanpur, Aliya-Bada, Jamjodhpur, Manaspar (Dhrol), Haripur (Khambhalia) and Varvala (Okhamandal) The improved variety of seeds used in the district are as follows.

Improved Variety of Seeds used for Crops

Crop	Improved variety used
Bajri ..	Hybrid 115
Jowar ..	Early 56
Wheat ..	N.P. 824, 710 Maxican learmarojo
Sugar-cane	Coimbatore
Groundnut	Punjab-1 or Samrala-1 AK-12-24
Cotton ..	CO_2-170
Castor ..	*Deshi* variety

Source :

District Agricultural Officer, Jamnagar

A number of co-operative societies were given licences to undertake work of purchasing improved seed from Government and selling it to cultivators at subsidised rates. The response from the cultivators was not very encouraging in the initial stages. But the importance of improved varieties of seeds was gradually realised by the farmer and at present large areas under cotton, groundnut, *bajri*, *jowar*, and wheat crops are covered by improved seeds evolved at the seed multiplication farms in the district. Increase in the area under improved seeds of crops between 1960-61 and 1966-67 can be seen from the following table.

Area Under Improved Seeds

(AREA IN HECTARES)

Year	Wheat	*Bajri*	Groundnut	Cotton
1960-61	1,966	1,594	8,638	7,758
1961-62	1,915	1,511	1,648	2,713
1962-63	71	164	74	2,353
1963-64	2,246	4,469	11,312	2,627
1964-65	13,436	4,808	23,751	6,632
1965-66	14,797	4,856	207,257	6,070
1966-67	5,941	12,856	213,732	N. A.

N. A.=Not available

The largest area under improved seeds is claimed by groundnut, an important cash crop of the district, followed by wheat and other crops. Irregular rains were responsible for the decline in area during the year 1962-63.

Rotation of Crops—*Jowar*, *bajri* and groundnut are the main crops of district which are usually grown in rotation. *Jowar* is followed either by *bajri* or cotton which again is followed by groundnut. In some areas wheat and groundnut are grown on the same field over and over again. The following rotation of crops is usually practised :

(i) *Jowar-bajri*-groundnut ; (ii) *Jowar*-cotton-*bajri* ; (iii) Sugar-cane-cotton-*bajri* ; (iv) groundnut-groundnut ; (v) wheat-wheat.

Manures—Cow-dung is the traditional manure in use. But the scarcity of firewood forces the villagers to burn cow-dung cakes and the land is thus deprived of one of its most popular and handy fertilisers. Where there are large flocks of sheep, the farmer bargains with the shepherd to feed and keep them upon his fields thus supplying good and rich manure to the soil. Most of the cultivators, have their own manure pits either near their homes or in the fields in which dung and household waste are collected. The waste thus collected is allowed to decompose and decay for a couple of months after which it becomes ready for

manurial purposes. Municipalities and nagar and gram panchayats of Jamnagar, Lalpur, Bhanvad, Jamjodhpur, Dwarka and Salaya are having programmes for preparing compost out of town refuge. The production and distribution of rural compost and town compost have increased considerably during the decade as can be seen from the following table.

(QUANTITY IN TONNES)

Year	Rural compost	Town compost
1	2	3
1960-61	9,094	3,731
1961-62	2,870-	4,336
1962-63	10,396	4,857
1963-64	11,407	4,058
1964-65	14,672	3,928
1965-66	26,417	8,400
1966-67	60,207	7,350

Fertilisers—The use of green manure is not yet popular and very few farmers have taken to it. The importance of chemical fertilisers, however, has been greatly realised by the cultivators in recent times because of their greater availability and relatively higher yield accruing from their use. The agricultural staff in the district arranges trial plots for different fertilisers with different crops and actual results are demonstrated to cultivators. Fertilisers in common use by the farmers in this district are urea, superphosphate, ammonium sulphate, nitrate of potash and groundnut cake both in powder as well as in mixture forms. For *jowar*, *bajri*, wheat and other cereals, fertilisers are applied in one dose or two. In case of cotton three doses are applied, the first at the time of sowing and the other two at intervals of one month each.

Among the fertilisers, nitrogenous fertilisers being a controlled commodity are sold and distributed only through co-operative societies. But other fertilisers which are de-controlled are sold through private agencies. The quantity sold during the last five years shows the increasing popularity of chemical fertilisers in recent times.

(QUANTITY IN TONNES)

Year	Ammonium sulphate	Super phosphate	Other manures
1	2	3	4
1961-62	117	2,240	864
1962-63	328	2,631	356
1963-64	635	2,605	1,049
1964-65	2,900	4,171	1,626
1965-66	3,315	7,043	2,543

Source :

District Agricultural Officer, Jamnagar

AGRICULTURAL PESTS AND DISEASES

Many agencies neutralise the good effects of a favourable crop production. They are (a) natural forces, (b) inroads by birds and animals, (c) pests and (d) diseases. Damage caused to crops by natural calamities like floods, storms and severe droughts are occasional. Stray cattle that cause damage can be prevented by proper fencing. But pests and diseases are responsible for an appreciable loss of agricultural produce which must be controlled by scientific methods to relieve the acute shortage of food in the country.

Pests—Systematic attempts at pest control and crop protection were wanting in pre-Independence days. The Government of Saurashtra started in 1950 a scheme of Crop Protection Service and a small staff was appointed for the purpose. In the beginning insecticides and fungicides were distributed free of charge and departmental personnel were sent to carry out control measures. The scheme had a good response from the cultivators. In 1956, another scheme was started under which plant protection appliances were distributed at half the cost to gram panchayats, subsidised farmers, co-operative farming societies and better farming societies. Both these schemes are still in operation.

The pests most commonly found in cereals, cotton, oil-seeds, fruits and vegetables are described below.

Cereals—Kansia, the blister beetle (*zonabris pustulata*) is about one inch long and half an inch thick, black in colour with yellowish strips across the wings. These insects attack *bajri* crop during Kharif season, eat away the pollen and petals of the flowers and retard the growth of grains. Cultivators try to trap them by means of hand nets and then destroy them. This does not seem to have proved very effective so far. The use of 5 per cent benzene hexachloride dust is found to be effective against this pest.

Khapedi, the surface grasshoppers (*chrotogonus sp.*) are small hoppers, medium black in colour, with various spots on a rough body surface. They attack crops like *bajri*, *jowar*, maize, etc., during the primary stage of their growth. The attack is sometimes so severe that the entire crop is endangered as a result of which resowing becomes necessary. These pests are active during the period July to November. As a preventive measure, cultivators sometimes plough and harrow the field immediately after harvesting to destroy the eggs of the pests that are laid in the soil. Benzene hexachloride has proved to be effective against the spread of this pest.

Gabh marani eyal, the stem borers (*chilo zonellus, s*) are most commonly found in *jowar* fields and sometimes in wheat, maize, and paddy also. Caterpillars which are found only inside the affected stems of young

plants bore inside the stem and thus cause drying of the central shoots. The pest, being an internal feeder, is very difficult to control. The usual practice followed is to uproot the infected plants along with the pests and destroy them. To save future crops from infestation, cultivators collect the stabbles after harvest and burn them to destroy the hibernating larvae.

Mashi or *molo,* the aphids (*aphis maidis F.*) is a widespread pest of different species affecting many crops in the district in different seasons. Some species are more common in Kharif season and attack *jowar,* cotton, maize and groundnut, while others which are found in Rabi season affect cabbage, cauliflower and lucerne. This soft-bodied insect sucks the sap of the leaf by mouth. The infection is generally more on the lower surface than on the upper one. The aphids are controlled by spraying resin solution, tobacco decoction or nicotine sulphate or pyrathrum extract or by dusting benzene hexachloride.

Cotton—Kapasni gulabi eyal, the pink boll worm (*platyedra gossypiella, S.*) feeds inside the cotton bolls and makes them drop down. It is more destructive to Indo-American varieties of cotton than to the indigenous one. As the caterpillars enter the bolls, their entry holes are closed and it is very difficult to spot out the affected bolls until they decay and fall to the ground. The pest does not attack the shoots. As a preventive measure a mixture of D.D.T. and sulphur is sprayed during early stages of infection.

Kapasni tapka wali eval, the spotted boll worm (*earlas fabia,* S.), is a widespread pest of cotton found in this district. The caterpillars mainly damage the shoots and bolls of cotton and stain the lint with the result that bolls fall off prematurely. The pest being an internal feeder is difficult to control. However, such preventive measures as the removal of cotton stalks after harvest, destruction of early fallen bolls with the larvae inside and heat treatment for cotton seed for the control of pink boll worms are usually taken.

Pulses—Popta kotarnar eyal, the gram pod borer (*heliothis obsoleta, F.*) is particularly harmful to pulses, especially the gram. The caterpillars feed on tender foliage and young pods make holes inside the pods and eat the developing seeds by inserting the anterior half portion of their body inside the pods. During the early stage of infection the pests are hand-picked and destroyed. Spraying with 50 per cent D. D. T. is also helpful.

Oil-seeds—Erandini charpagi eyal, the castor *semilooper* (*achoea janata L.*) is a minor pest and attacks occasionally the castor plants. It feeds on the leaves of the plants from the lower side only, leaving out the veins. The pest can be controlled by dusting benzene hexachloride.

Fruits and Vegetables—Lila chusia, the jassids (*empoasca devastens, D.*) generally attack the plants of vegetables such as brinjal, *bhinda,* etc. During the primary stage of the attack the margin of the leaves turns yellow and the continued sucking of cell sap leads to etiolation of the leaves and subsequent drying up, finally resulting in a stunted growth of the plant. A mixture of sulphur and D.D.T. or 5 per cent benzene hexa-chloride is sprayed to control the pest.

Thrips (*anaphothrips scirtothrips dorsalis, H.*) are common pests in vegetable crops such as onions, chillies and sometimes cabbages. These tiny insects suck the sap of the leaves and stems resulting in a curling of the leaves and the stunted growth of the plant. This symptom is most common in case of chillies. A good supply of manure and fertilisers stimulates the growth of the plant and ultimately helps to shake of the pest. The pest can also be controlled by spraying D.D.T., benzene hexachloride or nicotine sulphate or a mixture of D.D.T. and sulphur.

Fal ane toch ni eyal the brinjal shoot and fruit borer. (*leucinodes orbonalis. G.*) is one of the most common pests of brinjal doing considerable damage to the standing crops. The caterpillars bore into the stem and eat the internal tissues thus causing the plants to wither. It is believed that continuous growing of brinjal leads to more and more infestation and should, therefore, be avoided. It has been found that brinjals with long narrow fruits are less susceptible to the attack. A simple method of its control is the removal and destruction of the affected shoots and fruits along with the caterpillars.

Ambano madh, the mango stem borer (*batocera rubus, L.*) is a common pest in this district. It bores and tunnels through the stem and branches of the tree as a result of which the affected branches start drying up and exude from the bored holes. In severe cases of infection by the pest the whole cultivation is sometimes threatened with destruction. A simple method of controlling the pest is to inject a solution containing two parts of carbon disulphide with one part of chloroform and creosote.

Madhio, the mango hopper, (*idiocerus clypealis, L.*) is a serious pest throughout the district. It does considerable damange to the mango crop. The nymphs and adults suck the young leaves and flowers as a result of which the withering of the crop takes place. The pest can be controlled by dusting 5 per cent D.D.T. and sulphur dust mixed in the proportion of 1 : 1 or 1 : 2.

Crop Diseases—The standing crops suffer from a number of diseases, some of which are very serious at times. The common plant diseases prevalent in the district are *jowarno angario* and *bhuri* described below.

Jowarno angario, the *jowar* smut (*sphacelotheca sorghi*) is a major plant disease of *jowar* in the district. Its symptoms are not visible till the formation of earheads. The grain seeds in the earheads are either partially or completely decayed and destroyed because of the disease. The disease can be controlled by sulphur treatment.

Bhuri, the powdery mildew of mango (*odium mangiferae*) affects the blossoms of mango trees. Occuring simultaneously with hoppers, it causes severe blighting of blossoms during the months of January and February. This disease is controlled by application of fine sulphur dust to the blossoms at intervals of a fortnight. This measure is widely practised by mango growers all over the district.

A particular type of virus disease of plants is many a time found to affect the *papaiya* crop. The disease is highly infectious and is transmitted by aphids. The damage done by it is sometimes so grave that it destroys more than 75 per cent of the entire crop.

ACTIVITIES OF THE DEPARTMENT OF AGRICULTURE

The District Agricultural Officer looks after the (a) implementation of ment of the district. He is responsible technically to the Superintendiug Agricultural Officer, Rajkot, working under the Directorate of Agriculture and administratively to the District Development Officer. He is assisted is his work by an Agricultural Officer, Agricultural Supervisors, Agricultural Assistants and other staff.

The District Agricultural Officer looks after the (a) implementation of developmental schemes under the Five Year Plans, (b) organisation of agricultural demonstration centres, crop protection services and dry farming methods, (c) crop cutting experiments, seed multiplication farms and fertilisers, (d) distribution of improved seeds, implements, etc. The Agricultural Officer working under him looks after the taluka seed farms. There are 3 Agricultural Supervisors to help the District Agricultural Officer in carrying out different activities. Ten Agricultural Supervisors known as Extension Officers (Agriculture) working under his technical guidance are under the administrative control of Taluka Development Officers and one Agricultural Supervisor looks after the Aliya-Bada Seed Farm. Agricultural Assistants look after the taluka seed multiplication farms, and the Pilot Scheme of intensive cultivation of wheat. Much of the area under wheat, groundnut and cotton has now been covered by improved seeds. The Pilot Package Scheme is at present being implemented in Jamjodhpur, Kalavad, Dhrol, Jodiya and Jamnagar talukas where experiments in intensive cultivation are being carried out. Efforts to encourage cultivators to take to improved agricultural methods are being made by organising crop

competitions. For crop protection, an individual cultivator is given a subsidy of Rs. 50 or 50 per cent of the cost of appliances, whichever is less.

A number of schemes for the development of agriculture has been introduced and implemented in the district for which over Rs. 12·19 lakhs were spent during the first three Plan periods.

Research Activities—The Agricultural Department has opened an Agricutural Research Centre at Jamnagar since 1950-51. Experiments on plant breeding on behalf of the Union Government are also conducted at this centre which runs a seed multiplication farm. Other research activities carried out in the district include the *Bajri* Research Centre at Jamnagar and a Dry Farming Centre at Jam-Khambhalia.

The *Bajri* Research Centre which started functioning in 1962 conducts research to evolve improved varieties of *bajri*. The hybrid *bajri* evolved at the centre has become popular with the cultivators of the district. The research work for evolving hybrid varieties in *jowar* and maize has also been undertaken at this centre.

The Dry Farming Centre started at Khambhalia in 1957 arranges studies of a long term nature on various aspects of soil and moisture. The main functions of the centre are two-fold : (a) to evolve suitable dry farming methods of cultivation to get a higher yield of crops by making maximum use of available rainfall in dry zones of the district, and (b) to make extensive research in soil conservation with reference to soil moisture and physico-chemical characteristics and fertility of the soil. The experiments conducted at the centre mainly relate to (i) methods of application of farm yard manure on *bajri* and groundnut crops, (ii) inter-culturings in groundnut, *bajri* *jowar* and cotton, (iii) spacing-*cum*-seed rate trials on groundnut, *bajri, jowar* and cotton, and (iv) effects of application of nitrogen and phosphoric acid to groundnut crop. The Japanese method of paddy cultivation is also tried in certain selected areas of the district. Till 1963-64 it was adopted in 390 acres of land.

STATE ASSISTANCE TO AGRICULTURE

Cultivators are sometimes not able to make permanent improvements on their land due to paucity of finance. To help the cultivators improve their lands, agricultural loans are liberally advanced on long term basis. The Saurashtra Government used to grant *tagavi* loans to the agriculturists under the two well-known Acts, viz., The Land Improvement Loans Act (XIX of 1883) and Agriculturists Loans Act (XII of 1884) through the Revenue Department. The former was concerned broadly with long term finance and the latter with short term accommodation. After 1956 the work of providing

long term finance to the agriculturists was transferred to the Saurashtra Co-operative Land Mortgage Bank. After the formation of the Gujarat State from 1st May, 1960 the Gujarat State Co-operative Land Mortgage Bank redesignated as Gujarat State Co-operative Land Development Bank took over the entire work of financing the agriculturists in the State. The advances made by the Bank to the cultivators in this district from 1955-56 to 1965-66 totalled over Rs. 4·32 crores as detailed below.

Sl. No.	Purpose for which advances were made	Amount advanced during 1955-56 to 1965-66 (in Rs.)
1	2	3
1	Construction of new wells and repairs of old ones	15,059,942
2	Purchase of oil-engines, motor pumps, etc.	20,476,732
3	Purchase of tractors	1,495,433
4	Contour bunding	1,004,913
5	Construction of machine rooms, houses, etc.	1,901,328
6	Repayment of debts and other purposes	3,267,212
	Total	43,205,560

Source :

Annual Report, 1965-66, Gujarat State Co-operative Land Development Bank Limited, Ahmedabad, pp XXII-XXIII

It is evident from the statement given above that a major portion (more than 80 per cent) of the advances given by the Bank is utilised for purchasing engines, motor pumps, etc , and construction of new wells or repairs of old ones. The activities of the Bank are described in greater details in Chapter VI—Banking, Trade and Commerce.

ANIMAL HUSBANDRY

The district Animal Husbandry Officer, assisted by his staff, looks after the livestock and veterinary activities of the district. Animal husbandry is complementary to and inseparable from agriculture. Livestock raising is an economic activity pursued by certain sections of the community who have made grazing and breeding of livestock their traditional occupation. Livestock has proved to be a very valuable asset also to the farmer. It provides him with the draught power required for cultivation, and an additional means of supplementing his income.

Every farmer usually has at least a cow or a buffalo and a pair of bullocks which perform a variety of functions chief among them being ploughing, drawing water lifts (*kos*), and carrying bullock carts, agricultural implements, etc. As mechanical devices have not been introduced to any appreciable extent in the cultivation of land and other farming operations.

bullocks provide the principal motive power needed for agriculture. Thus cattle wealth is of great importance to the economy of the district, especially in agriculture.

The following statement gives figures of livestock population in the district for the years 1951, 1956, 1961 and 1966.

STATEMENT IV·15

Livestock Population, 1951 to 1966

Sl. No.	Category of livestock	(POPULATION ACCORDING TO THE LIVESTOCK CENSUS 1951*	1956*	1961*	1966†
1	2	3	4	5	6
	Total livestocks ..	**633,997**	**695,485**	**740,527**	**743,595**
1	Bullocks and cows ..	258,676	278,961	317,263	318,936
	(a) Males over 3 years ..	110,554	122,508	149,360	145,978
	(b) Females over 3 years.	91,712	75,870	86,523	87,628
	(in milk) ..	(64,789)	(46,701)	(53,080)	(57,193)
	(c) Young stock ..	47,410	80,583	81,380	85,332
2	Buffaloes	89,603	74,075	98,954	99,608
	(a) Males over 3 years ..	602	470	818	774
	(b) Females over 3 years	48,207	44,893	59,057	59,538
	(in milk) ..	(35,277)	(27,336)	(34,840)	(36,416)
	(c) Young stock ..	40,794	28,712	39,079	39,296
3	Sheep	169,468	200,285	191,747	198,264
4	Goats	99,626	128,046	114,450	111,650
5	Horses and ponies ..	5,914	6,630	8,069	6,469
6	Mules	12	20	17	46
7	Donkeys	9,710	11,475	8,471	7,539
8	Camels	983	993	1,556	1,080
9	Pigs	5	N. A.	N. A.	1
	Poultry	6,095	14,011	17,126	23,543

N. A.—Not available

Source :

**District Census Handbook* 1961, Jamnagar, p. 33

†Bureau of Economics and Statistics, Gujarat

The livestock population of the district has shown a steady increase during the period 1951 to 1966. The heads of cattle increased from 633,997 in 1951 to 695,485 in 1956, then to 740,527 in 1961 and to 743,595 in 1966, showing an overall increase of 109,598 or 17·29 per cent during this period. An overall increase in numbers is indicated in almost all the categories of livestock except a few. The number of cows over 3 years has decreased by 4,084 or 4·45 per cent during the period, whereas the decrease is more striking in case of milch cows (11·72 per cent). Moreover, despite an overall increase of 11·17 per cent in case of buffaloes, milch buffaloes have increased by 3·23 per cent only during the course of 15 years. But the number of bullocks and young stock has increased by 22·10 per cent and 79·99 per cent respectively revealing the progress the agricultural sector is making after

Independence. Other increases worth notice are sheep 17 per cent, goats 12·07 per cent, and horses and ponies 9·38 per cent. Whereas donkeys decreased by 2,171 or 22·36 per cent, camels increased from 983 in 1951 to 1,080 in 1966.

Various schemes relating to the breeding and improvement of livestock, etc., are in operation in the district. To improve the breed and quality of milch cattle and bulls, a bull rearing scheme was started at Jamnagar in 1959. It has six sub-centres at Dhunvav, Hadiana, Bedchela and Aliya-Bada where good breeding bulls are reared. Under the scheme of artificial insemination six such centres were opened during the Second Plan period. Under another scheme calves of Gir breed are given to charitable institutions and *maldharis* for rearing, for which they are paid Rs. 10 per month per calf. Assistance at the rate of Rs. 30 per horse was given for the upkeep of certified Kathi horses under a scheme for improving the breed of horses. But this scheme is no longer in operation now. A scheme for the improvement of sheep has also been undertaken at 8 Sheep Extension Centres, one each at Jamnagar, Jodiya, Bhatia, Khambhalia, Dwarka, Lalpur, Bhanvad, and Kalavad. Rabaris and Bharwads are given guidance in sheep rearing and improvement of wool at these centres.[1] Treatment of sheep, distribution of improved and certified rams for improving the breed of sheep, etc., are the main activities of these centres. Cattle fairs and exhibitions are also held regularly at various places in the district to demonstrate the advantages of various schemes implemented by the Department.

Poultry—Poultry keeping as a scientific pursuit was unknown in the past. It is only recently that the people of the district have begun to appreciate the value of poultry as a source of subsidiary income and food production. Various schemes of poultry development undertaken in the district include the establishment of a Government Poultry Farm during the Second Five Year Plan. Five private poultry farms have also been established in the district. The Government organises poultry shows and extends technical advice in poultry management. Poultry keepers are given incentives by way of grant or subsidy for incubators, breeding equipment, poultry houses, etc. As a result of these measures and the growing interest taken by the public, poultry has shown a remarkable growth during the period 1951-66 and increased from 6,085 in 1951 to 23,543 in 1966.

Dairying— Dairy development serves the dual purpose of supplying pure and good milk to the people at a reasonable price and of ensuring reasonable return to the milk producers. With this object in view a small public dairy

1. During the Nawanagar State regime wool used to be exported from Jodiya port in large quantity. Outside India the wool was popularly known as the Jodiya wool and was considered the best for the manufacture of carpets. Though much of the wool is now exported from Bedi port, it still continues to be known as Jodiya wool

was started at Jamnagar in 1956 with Rs. 3 lakhs contributed by the Saurashtra Government and Rs. 5,400 raised by public contribution. During the Third Five Year Plan the private shares of the dairy were purchased by the Government as it was running in loss. The dairy is now fully owned and managed by the State. A further amount of Rs. 7·50 lakhs was spent by the Government for its development during the Third Plan period. During the year 1966-67, 1,523 litres of milk per day was sold by the dairy. The Government has also started a District Milk Producers' Co-operative Union and 9 Milk Producers' Co-operative Societies in the district during the Third Plan period. To encourage co-operative efforts at supplying milk to the dairy two grass lands admeasuring 1,298 acres were given on lease to two such societies.

FISHERIES

The seacoast is the main source of fisheries in Jamnagar. The important fishing centres are Jodiya, Sachana, Bedi, Sarmat, Sikka, Bharana, Salaya and Okha. Almost all the varieties of fish of Saurashtra waters are found here at different seasons of the year. The Gulf of Kutch appears to be a spawning ground for a number of species. The Jamnagar and Okhamandal coasts which form the northern boundaries of Kathiawar peninsula have been famous for about 800 years for the pearl-oysters, sacred chanks and window pane oyster fisheries. There are 42 coral reefs situated on the coast. They are of the fringing type, and provide an excellent bed for pearl-oysters.

In the former Nawanagar State, the State used to grant monopoly of fishing to private individuals With the change of time. the monopoly system in fishing except for pearl-oysters, has been done away with, and co-operative societies of fishermen started to promote fishing in the coastal areas. There are 20 villages of fishermen, with a total population of 30,000 persons. The chief fishing community is of Vaghers. About 1,500 fishermen operating nearly 400 boats land approximately 1,200,000 kg. of fish annually, most of which is exported either fresh or as cured fish to destinations outside Saurashtra.

Fishing is generally done with drag nets, hooks and lines, and also with cast nets, *gholiyas*, *wedi* and *palia*. The boats are of *machhwa* type 20 to 30 feet long. About 7 fishermen with about 25 nets sit in a boat. The cost of each such boat varied between Rs. 2,000 and Rs. 4,000 in 1964-65. Most of these boats but two were non-mechanised by the end of the Second Plan period. When the boats bring their catch to the shore, the fish are unloaded in baskets, which are dipped in sea-water for washing and then taken to scaffoldings erected for the purpose. They are hung on thick ropes in pairs, the prominent jaw of one fish being interlocked with the other, and dried for about 72 hours.

The important fisheries in the district are (i) Prawn, (ii) Ghol-dara, (iii) Mullet, (iv) Shark, and (v) Shell (Pearl, Chank and Window pane).

Prawn—The commercially important *crustacean* is well-known as a sea-fish found in the post-monsoon period. In 1963-64, the total production of prawn fish in the district was 751,450 kg.

Ghol-dara—This fish is found for of a very short period usually between March and May. The fishing grounds are situated in the sea 7 to 14 fathoms off the Bedi coast. The two important varieties of this fish are Jow fish and Thread fish. The production of Ghol-dara fish was 236,865 kg. in 1963-64.

Mullet—This is essentially an in-shore fish found mostly in creeks about 1·6 km. away from the shore throughout the year. The maximum landings are between May and October. Its total production was 496,140 kg. in 1963-64.

Magara (*Shark*)—Shark belonging to the genus *carcharidae, pristis*, etc. are caught in the Gulf of Kutch. They usually get entangled in the drift nets. At Sikka and Salaya Sharks are saltcured and exported. The output of Sharks in the district was 143,533 kg. in 1963-64.

Shell Fisheries—Shell fisheries constitute a very important item in the fishing industry of this zone. One of the highlights of fisheries development is the collection of pearls from the pearl-oyster (*pteriavulgaris*) which are found on the Jamnagar coast attached to the coral reefs locally known as 'Kada'. In all 42 such reefs totalling about 6,000 acres are situated on this side of the Gulf of Kutch. Not all of them are productive. A few oyster beds on Pirotan, Remin, Jhinada, Deeda, Morada, Dandi, Narara and Kalubhar seem to be rich, although production of oysters is sparse and sporadic. Pearls are highly priced and a single pearl fetched Rs. 12,000 in 1937.

Pearl-fisheries are the monopoly of the Government and are usually exploited every third year during the monsoon by the Superintendent of Fisheries, Jamnagar. Oysters are picked up by local fishermen specially engaged for the purpose. Collection of oysters is comparatively simple and does not entail any diving, etc. Oyster beds get exposed during low tide, when oysters can be collected in ankle-deep waters. The oysters are then cut open after about four days and pearl from their flesh removed. During 1960-61, 20,496 oysters were collected out of which 17 *tolas* of pearl valued at Rs. 6,005 were collected. The only other place in India where such real pearls are found is off the coast of Tuticorin in Madras State.

Chanks—The next important fisheries are the Chanks (*Xancus pyrum*) a univalved mollusc. They are fished along the entire coast between Okha and Balachadi on the outskirts of the oyster beds. They are also collected during low tides when they get exposed. These fisheries are conducted departmentally and Chanks collected throughout the year. But the maximum numbers are brought during April to September. Fishermen are paid for the Chanks collected according to the fixed rate. Annual production amounts to 18,000 to 20,000 Chanks. The Chanks are used for making bangles.

Window Pane Oyster Fisheries—Another shell fishery of minor importance is Window Pane Oysters (Placenla Placenta) found on the muddy banks of Positra, Pindara, Ghumra and Sachana. These oysters are fished almost throughout the year. The shell is about 4 to 5 inches in diametre. The oysters yield tiny seed pearls which do not have any ornamental value but are sold to *hakims* and *vaidyas* for medicinal purposes. They are so called as they are used in making small panes. They are also used in industrial undertakings as a source of carbonate of calcium and for fancy articles.

The following statement gives information about the production, export and local consumption of fish from 1961-62 to 1963-64.

Fish Production Export and Local Consumption

Year	Total production		Local consumption		Export	
	Quantity in kg.	Value in Rs.	Quantity in kg.	Value in Rs.	Quantity in kg	Value in Rs.
1	2	3	4	5	6	7
1961-62 .	2,785,527	1,084,810	115,760	46,096	2,669,767	1,038,804
1962-63 ..	2,308,273	1,041,295	56,369	28,594	2,251,904	1,012,700
1963-64 ..	2,306,773	959,491	93,549	43,032	2,213,224	915,858

Source :

Annual Administration Reports of the Department of Fisheries, 1962-63, p. 40 1963-64, p. 56, Ahmedabad

ADMINISTRATIVE SET-UP OF THE FISHERIES DEPARTMENT

The Superintendent of Fisheries, Jamnagar, is in charge of the Fisheries Department of the district. He is responsible technically to the Assistant Director, Rajkot. He implements the various fisheries development schemes at the district level. He is assisted in his work by three Fisheries Officers and other staff. There is also a Research Officer in Jamnagar who is directly under the technical control of the Director of Fisheries, Ahmedabad. He looks after the research and investigation of Pearl and Chank fisheries, seaweed, etc. He is assisted by two Senior Research Assistants, one Fisheries Officer and other staff.

Animal Diseases—The commonly prevalent animal diseases in the district are Rinderpest or *balia mata*, Anthrax or *kalio tav*, Black quarter or *ganthio tav*, Pleuro pneumonia or *unkariu*, Homesstagic septicoemia or *galsundho*, Rabies or *hadakva* and Foot and Mouth disease or *kharvaso* and *movaso*. Of these, *kalio tav*, *ganthio tav*, *galsundho* and *hadakva* are considered more deadly than the others which are generally controlled by inoculation.

During the year 1966-67, ten animals were affected by *galsundho*, 88 by *balia mata* and over 1,500 by Foot and Mouth diseases. Of these only 35 proved fatal. The total number of inoculations was 2,080 during the year.

Veterinary Aid—The district has one veterinary dispensary in each of its taluka headquarters where the livestock of the surrounding areas are brought for medical treatment. The district is also provided with a mobile dispensary which goes to such remote villages as are not in a position to receive the benefits of the taluka veterinary dispensary. The animals are vaccinated by the staff of the mobile dispensary to protect them against the commonly prevalent diseases. Various schemes relating to veterinary aids, and prevention of contagious diseases were undertaken in the district during the Second Plan period. These were schemes for the breeding and improvement of livestock, rearing of bulls and purchase of bull calves reared systematically for breeding purposes. Artificial insemination centres were opened at six places in the district. A scheme for improving the breed of horses was also introduced in the district in 1959-60, but was closed in 1964. Cattle fairs and exhibitions are held regularly at various places in the district to demonstrate the advantages of schemes implemented bv the Department.

FORESTS

The forest area in the district is scattered and very limited in extent. It is found in the southern part of Jamjodhpur and Bhanvad talukas, the eastern part of Lalpur taluka, and near the seacoast in Jamnagar taluka. According to the Divisional Forest Officer, there were 632·50 sq. km. of forests in the district in 1963-64, out of which 51·17 sq. km. were reserved and 581·33 sq. km. were unclassed. The total area under forests works out to less than 6 per cent of the total geographical area. The main forest products are *cher* wood, *karod* leaves, etc. Since the forests are poorly stocked, it is not possible to exploit them for timber and firewood. The existing forests which were not properly looked after in the past have to be well preserved and guarded against soil erosion and further deterioration. With this end in view the following schemes have been undertaken for the improvement of forests in the Jamnagar district.

(i) *Scheme for Rehabilitation of Degraded Forests*—Due to indiscriminate grazing and unscientific management of forest areas in the past, large areas

have turned into blanks and semi-blanks with scattered growth of stunted trees here and there. Such areas are estimated at about 8,094 hectares. A scheme aiming at restocking them with suitable species and turning them into normal forests has been taken up with the result that 627 and 476 hectares of such areas have been afforested during the Second and Third Plan periods respectively.

(ii) *Scheme for Improvement of Mangrove Forests*—People living in the vicinity of forests have a tendency to resort to illegal cutting of trees, and sending their cattle and camels for grazing. About 5,666 hectares were estimated to be in a denuded and semi-denuded condition of which 1,838 hectares were afforested during the Third Plan period.

(iii) *Scheme for Afforestation and Soil Conservation of Denuded Areas*—There are large numbers of semi-blank, barren and poorly stocked areas in plains and hills which are in imminent danger of soil erosion. Such areas are found by experience to be potentially strong enough to support vegetation and check erosion. 204 hectares of this category out of about 8,094 hectares have been afforested under this scheme during the Third Plan period. *Van mahostav* celebrated with public co-operation has also been helpful in developing among the people a growing consciousness for the preservation and protection of trees.

Vidis or Grass Lands— Areas without tree growth are used as *vidis* or grass lands. They covered 5,996 hectares of land in the district during 1965-66. *Vidis* are classified as (i) reserved, and (ii) unreserved. The former occupied 3,595 hectares of land, while the latter 2,401 hectares. Reserved *vidis*, 10 in number, are, set apart by Government for collection and storage of grass and the non-reserved *vidis* are leased to panchayats, institutions and individuals by public auction. The annual collection of grass from the reserved *vidis* is normally 35 lakh kg. as against the total requirement of 60 lakh kg. In view of the big gap between the production and requirement of grass in the district, development and improvement of grass lands on scientific lines assumes a special significance, and is all the more important in a district like Jamnagar where rainfall is both inadequate and irregular Grass grown in the reserved *vidis* in the district is inadequate in quantity and poor in quality. A scheme for the development of grass lands and protecting them from illicit grazing by providing boundary trenches or loose stone walls along the periphery has been taken up and 304 hectares developed during the Third Plan period.

FLOODS, FAMINES AND DRAUGHTS

Vagaries of monsoon have been frequent in Peninsular Gujarat. Floods were, of course, few but famines were too many in this as well as in other

parts of the region. The famine of 1559 A. D. is the earliest recorded in Saurashtra. *It was of very severe intensity and was popularly known as* Jagdu Shah's famine. Jagdu Shah was a wealthy businessman of Kutch who had helped the people of famine stricken areas very liberally in kind and cash and thus enabled them to tide over the ill effects of this calamity.

Another severe famine which devastated the whole of Saurashtra region is known as *satyasio* as it occurred in Vikram Samvat 1687 (1631-32 A. D.). As the monsoon had failed completely, the food became so scarce that the poor were reported to have parted with their children for a loaf of bread.

The years *1647*, 1681-82, *1686*, 1694, *1696*, *1718* and *1723* were also recorded as scarcity or famine years though no reliable data are available about their intensity. The year 1731 was a year of excessive rains. It is known as second *satyasio*, occuring in the Samvat year 1787, exactly hundred years after the first *satyasio* of 1687 V. S. A major portion of Saurashtra was lashed by heavy downpour which took a heavy toll of human life. In 1747 A. D. the rainy season failed completely resulting in an acute scarcity of food and water. The prices of foodgrains rose very high and beyond the reach of the common man.

Scarcity conditions were also reported to have prevailed during 1774, 1780, 1785 and 1790, when Saurashtra was affected by acute scarcity of food, fodder and drinking water causing much distress to human life and cattle

The following are the particulars of the years of scarcity famine in Jamnagar district since the beginning of the 19th Century.

The year 1804 was one of poor rainfall and scarcity conditions prevailed in many parts of the district. The years 1811 and 1812 were also scarcity years. Excessive rains in 1814 are reported to have disrupted the area to a large extent. Its effects were so severe round about Jamnagar that a large number of persons migrated southwards towards Bhavnagar. 60 villages were completely destroyed by devastating rains and floods. There was partial failure of crops in 1825, 1834, 1838, 1846, 1857, 1861 and 1864 due to poor, uneven and irregular rainfall. It, however, did not cause too much distress to the people on account of the relief measures taken by the rulers. Jam Ranmalji of Nawanagar ordered construction of the *Kotha* and *Lakhota* which provided employment to needy people during the scarcity years of 1838-39. Foodgrains were freely distributed to the needy. These and other relief works together with distribution of imported rice prevented greater miseries during that famine.

Two severe famines occurred in succession in 1877 and 1878. These two years were characterised by want and suffering. However, " few, if any,

died from starvation except in isolated parts of Jamnagar and Dhrafa near Lalpur. Bhanvad and Jamjodhpur where the hills and the distance from the marts made help almost impossible." 1

The famine of 1899-1900 was one of the severest of famines that had affected the district and the whole of Gujarat. The severity of this famine known as *chhapanio* (that which occurred in the 1956th year of the Vikram era) was enhanced by a complete failure of rains. After a promising start in June, 1899 the rain disappeared altogether. Rivers ceased flowing and fields stopped yielding crops. All classes of people were severely affected by the calamity. The State of Nawanagar was quick to start relief measures in time. *Tagavi* advances in cash and kind were granted to agriculturists, subsidies were given for digging and deepening wells, remissions in *rajbhag* were granted on a large scale and poor-houses were opened for dispensing relief to the poor and needy persons. The State spent Rs. 2.15 lakhs in famine relief works and Rs. 3·39 lakhs in public works. Loans in cash and kind worth Rs. 2·87 lakhs were advanced to cultivators during the year 1899-1900 and were continued in the following years also, when Rs. 3.45 lakhs were advanced in the year 1900-1901, Rs. 1.15 lakhs in 1901-1902 and Rs. 1.96 lakhs in 1902-1903.

Rainfall was scanty in many parts of the district during 1903-04 and 1904-05. Kalyanpur and Khambhalia were the worst affected parts, the former receiving only 1.10 inches and 2·45 inches of rainfall in 1903-04 and 1904-05 respectively. Kharif crops failed completely in the whole district except in Atkot, Kandorana and Jodiya. The occurance of frost and *geru* in cotton, sugar-cane and wheat multiplied the misery and did extensive damage to these crops. Famine relief works were started at about twenty places entailing a total cost of Rs. 1·22 lakhs to the Nawanagar State in 1905-06. The State also suspended revenue during these two years.

The decade 1910-1920 showed the proverbial capriciousness and vagaries of the monsoon throughout the district. While rainfall was almost double the normal in 1910-11, 1912-13, 1917-18 and 1918-19 it was much below the average in the remaining years. It was, for example, even less than 5 inches in 1911-12, less than 6 inches in 1919-20 in Dhrol and less than 4 inches in 1918-19 in Nawanagar State. Prices of foodgrains remained at a high level and fodder famine prevailed almost everywhere. Grass and grain were sold to the people at subsidised rates. These measures helped them in the initial stages but the chain of bad years told heavily upon the people during the later half of the decade when they began to feel the agonising effects of recurring scarcity which they had hardly experinenced before. The influenza epidemic of 1918-19 took a heavy toll of life and almost ruined

1. WATSON JOHN, W., *Gazetteer of the Bombay Presidency*, Vol VIII, *Kathiawar*, p. 198, 1884

the health of the people. Culticators in many parts were rendered bed-ridden and could not attend to their fields. As a result, fields were left at the mercy of stray cattle and birds which destroyed almost the entire crops. Prices of foodgrains rose high and adversely affected all strata of society. In Jamnagar a rupee which could buy in 1916-17 about 22 seers of *jowar* could purchase only 8 seers in 1918-19. Cheap grain shops were opened at Jamnagar, Khambhalia, Jodiya, Bhanvad, Amran, Alia-Bada, Kalavad, Jamjodhpur, Lalpur and Hadmatia. Some of these were the outcome of generous help rendered by the leading merchants in the district. 15,000 maunds of grain in the city of Jamnagar and 35,000 maunds of grain in the interior areas were distributed by the Nawanagar State. 75 lakh lbs. of grass was sold to the cultivators at half the cost, i. e., at Rs. 12½ per 1,000 lbs. Cattle camps were opened at six places in the district. Some philanthropists of Nawanagar State living in Bombay also helped the State in the noble task of relieving the distress. The State started several relief works at a total cost of over Rs. 6 lakhs. These measures provided ample relief in the affected areas. Remissions of four annas in a rupee and suspensions in land revenue amounting to over Rs 5 lakhs were granted on a liberal scale. The Nawanagar State also advanced more than Rs. 3 lakhs by way of *tagavi* for various purposes.

Rainfall was scanty in the years 1922, 1923, 1925 and 1928 in many parts of the district. *Tagavi* granted on liberal scale by the states of Nawanagar and Dhrol lessened the gravity of the situation. The monsoon failed again in 1931 ; the rainfall in Jamnagar was 13 inches but it was much less in Kalyanpur, Bhanvad, Khambhalia, Lalpur and Kalavad which were the worst affected areas. Outturn of crops was less than 50 per cent of the normal with the result that prices registered a rise. The State of Nawanagar advanced *tagavi* and other advances on a liberal scale.

A severe famine again ravaged the whole district in 1939-40. Rainfall was deplorably low with an average of 5.60 inches in Nawanagar State and 3.22 inches in Dhrol State. It was almost negligible in Khambhalia, Kalyanpur, Bhanvad and Lalpur talukas which were declared as famine areas. As a result of the poor outturn of crops prices of foodgrains shot-up to a high level. The States suspended their revenue demand and granted liberal loans to cultivators. The state of Nawanagar advanced Rs. 1·31 lakhs by way of *tagavi* in 1939-40. Scarcity of water both for irrigation and drinking purposes was keenly felt. The scheme of granting Rs. 125 to every cultivator who constructed a new well acted as an incentive to the construction of 2,988 new wells in Nawanagar State.

Fortunately the district is not affected by any severe famine since 1939-40. The years 1948-49, 1951-52, 1957-58 and 1963-64, however, were scarcity-years. The scarcity of 1948-49 affected practically the whole district, the

total annual average rainfall being only 9.5 inches. In 1951-52 and 1957-58 scarcity affected only a part of the district particularly the areas of Kalyanpur and Jodiya talukas. Relief works started by Government in the affected areas went a long way in helping the people to face the scarcity condition.

No severe famine affected the district between 1958-59 and 1961-63. However, the year 1963-64 was a scarcity year. In many parts of the district the rainfall was much less than the average. As many as 490 villages of the total of 720 villages of the district were under scarcity or semi-scarcity conditions. Relief measures were started by the Government at a number of places involving a total expenditure of Rs. 6.14 lakhs during the year.

Scarcity Affected Areas—In 1958-59, the Government of Bombay set up a Fact Finding Committee with a view to collecting full data regarding the famine and scarcity conditions in the State and making recommendations as to future preventive and ameliorative measures to be taken in this connection.

The Committee visited the district in August, 1959 and demarcated areas which suffered from chronic scarcity. It considered it necessary to grade scarcity areas so that those which suffered intensely due to failures of rainfall at frequent intervals could be distinguished from others where the failures were less frequent or less severe. It, therefore, divided the scarcity areas into three categories, A, B and C, according as there has been a total or almost total failure of crop once every (a) three years, (b) six years or (c) ten years respectively. On this basis Okhamandal taluka was put in 'A', Kalyanpur in 'B' and Jodiya and Kalavad in category 'C'.

The Committee observed that the area under irrigation in the district was negligible and there were no important major or medium irrigation projects. It, therefore, recommended the development of minor irrigation tanks and check dams for seasonal irrigation wherever suitable sites could be located. The Committee found that there were 4.75 lakh acres of land which were bundable and that there was good scope for contour bunding. It also recommended that the existing grass areas in the district should be improved by rotational grazing and barren and waste lands should be enclosed and improved for grazing purposes. The Committee also suggested that schemes for the supply of water to villages in the scarcity affected areas should be undertaken to remove the difficulty of drinking water. Measures to implement these recommendations have been taken up by the Government by including schemes for providing irrigation facilities, grass land improvement, soil conservation and rural water supply.

STATEMENTS

STATEMENT IV.1

Persons Engaged in Agriculture by Taluka, 1961

Sl. No.	Taluka	Total/ Rural/ Urban	Cultivators			Agricultural labourers			Total agriculture population		
			Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10	11	12
	Jamnagar district ..	**T**	**165,237**	**105,449**	**59.788**	**19,161**	**11,541**	**7,620**	**184,398**	**116,990**	**67,408**
		R	**156,043**	**99,534**	**56,509**	**18,229**	**10,867**	**7,362**	**174,272**	**110,401**	**63,871**
		U	**9,194**	**5,915**	**3,279**	**932**	**674**	**258**	**10,126**	**6,589**	**3,537**
1	Jamnagar ..	T	24,077	15,197	8,880	3,074	1,858	1,216	27,151	17,055	10,096
		R	22,945	14,360	8,585	2,696	1,595	1,101	25,641	15,955	9,686
		U	1,132	837	295	378	263	115	1,510	1,100	410
2	Dhrol ..	T	10,117	5,840	4,277	879	462	417	10,996	6,302	4,694
		R	9,347	5,455	3,892	873	457	416	10,220	5,912	4,308
		U	770	385	385	6	5	1	776	390	386
3	Jodiya ..	T	15,342	9 397	5,945	1,160	687	473	16,502	10,084	6,418
		R	14,896	9,123	5,773	1,130	667	463	16,026	9,790	6,236
		U	446	274	172	30	20	10	476	294	182
4	Kalavad ..	T	21,000	13,011	7,989	2,627	1,555	1,072	23,627	14,566	9,061
		R	20,256	12,600	7,656	2,588	1,526	1,062	22,844	14,126	8,718
		U	744	411	333	39	29	10	783	440	343
5	Lalpur ..	T	14,343	9,232	5,111	2,426	1,456	970	16,769	10,688	6,081
		R	13,773	8,887	4,886	2,331	1,385	946	16,104	10,272	5,832
		U	570	345	225	95	71	24	665	416	249
6	Jamjodhpur ..	T	17,992	11,223	6,769	3,857	2,362	1,495	21,849	13,585	8,264
		R	16,231	10,251	5,980	3,660	2,217	1,443	19,891	12,468	7,423
		U	1,761	972	789	197	145	52	1,958	1,117	841
7	Okhamandal ..	T	7,192	4,478	2,714	795	313	482	7,987	4,791	3,196
		R	6.771	4 150	2.621	785	307	478	7 556	4,457	3,099
		U	421	328	93	10	6	4	431	334	97

8	Kalyanpur ..	T	21,805	14,241	7,564	1,764	1,163	601	23,569	15,404	8,165
		R	21,805	14,241	7,564	1,764	1,163	601	23,569	15,404	8,165
		U		.	..	..	..	..	..	..	..
9	Khambhalia ..	T	18,197	13,130	5,067	1,032	734	298	19,229	13,864	5,365
		R	15,736	11,383	4,353	959	669	290	16,695	12,052	4,643
		U	2,461	1,747	714	73	65	8	2,534	1,812	722
10	Bhanvad .	T	15,172	9,700	5,472	1,547	951	596	16,719	10,651	6,068
		R	14,283	9,084	5,199	1,443	881	562	15,726	9,965	5,761
		U	889	616	273	104	70	34	993	686	307

Source :

District Census Handbook 1961, Jamnagar

STATEMENT IV.8

Area Under Food Crops by Taluka, 1964-65

(AREA IN HECTARES)

Sl. No.	Taluka	Cereals					Pulses		Sugar-cane	Condiments and spices			Fruits and vegetables			Total food crops
		Rice	Wheat	*Jowar*	*Bajri*	Other cereals	Gram	Other pulses		Chilles	Garlic	Other condi-ments and spices	Pota-toes	Onion	Fruits and other vege-tables	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	District total ..	**1.876**	**15.729**	**119.678**	**81,607**	**756**	**754**	**833**	**5,067**	**838**	**3,123**	**40**	**125**	**11**	**1,581**	**234,968**
1	Okhamandal ..	..	100	6,601	12,409	..	..	218	..	5	.	..	..	..	185	19,518
2	Kalavad ..	255	1,337	9,197	8,066	67	36	236	344	34	1.417	..	6	3	57	21,055
3	Jamnagar ..	236	1,407	21,587	8,072	669	211	42	1,432	14	304	..	51	6	550	34,581
4	Khambhalia ..	161	1,265	17,757	11,468	6	68	21	325	434	715	..	68	..	338	32,626
5	Jamjodhpur ..	226	795	3,225	5,018	9	..	28	998	31	28	..	..	2	181	10,541
6	Dhorl ..	55	1,031	11,425	5,097	2	183	206	290	..	263	14	..	..	27	18,593
7	Kalyanpur ..	591	1,088	17,781	18,859	..	..	..	65	191	12	..	..	..	51	38,639
8	Jodiya ..	39	7,138	14,902	6,656	3	242	35	470	3	69	26	..	..	59	29,642
9	Bhanvad .	211	879	4,219	2,922	..	..	..	522	85	..	..	..	..	44	8,882
10	Lalpur .	102	669	12,984	6,040	..	14	47	620	41	315	..	..	..	39	20,891

Source . Director of Agriculture, Gujarat State, Ahmedabad

STATEMENT IV-9

Area Under Non-food Crops by Taluka, 1964-65

(AREA IN HECTARES)

Sl. No.	Taluka	Oil-seeds: Groundnut	Oil-seeds: Sesamum	Oil-seeds: Castor	Oil-seeds: Other oil-seeds	Cotton	Drugs and narcotics	Fodder crops	Other misc. non-food crops	Total non-food crops
1	2	3	4	5	6	7	8	9	10	11
	District total ..	**312,204**	**8,475**	**982**	**90**	**23,608**	**805**	**6,285**	**399**	**358,718**
1	Okhamandal	2,484	686	234	..	120	..	79	17	3,620
2	Kalavad	56,996	288	15	69	898	38	1,254	..	59,557
3	Jamnagar	35,452	1,798	16	..	119	565	537	..	39,487
4	Khambhalia	38,283	866	165	..	830	25	756	..	40,925
5	Jamjodhpur .. .	40,469	228	21	..	3,815	..	730	..	45,263
6	Dhrol . ..	18,398	388	4	..	889	..	422	..	20,401
7	Kalyanpur .. .	34,326	2,207	286	..	6,908	..	2,086	382	46,195
8	Jodiya	15,496	1,092	27	..	8,851	..	246	.	25,712
9	Bhanvad	32,917	184	15	..	1,042	..	..	..	34,158
10	Lalpur	37,383	436	149	22	136	177	95	..	38,400

Source :
Director of Agriculture, Gujarat State, Ahmedabad

STATEMENT IV·11

Area of Food Corps Irrigated by Taluka, 1964-65

(AREA IN HECTARES)

Sl. No.	Taluka	Rice	Wheat	*Jowar*	*Bajri*	Sugar-cane	Chillies	Misc. food crops	Total food crops
1	2	3	4	5	6	7	8	9	10
	District total	**1,876**	**7,791**	**1,961**	**1,486**	**5,066**	**838**	**5,185**	**24,203**
1	Okhamandal	..	100	..	..	..	5	184	289
2	Kalavad	255	1,337	..	—	344	34	1,489	3,459
3	Jamnagar	236	778	916	158	1,432	14	1,180	4,714
4	Khambhalia	161	1,264	..	..	325	434	1,189	3,373
5	Jamjodhpur	226	795	..	..	998	31	219	2,269
6	Dhrol	55	483			290	..	305	1,133
7	Kalyanpur	591	1,088	1,045	1,328	65	191	64	4,372
8	Jodiya	39	378	..	..	470	3	157	1,047
9	Bhanvad	211	879	..	..	522	85	44	1,741
10	Lalpur	102	689	..	..	620	41	354	1,806

Source :
Director of Agriculture, Gujarat State, Ahmedabad

STATEMENT IV·12

Area of Non-food Crops Irrigated by Taluka, 1964-65

(AREA IN HECTARES)

Sl. No.	Taluka	Cotton	Groundnut	Castor	Fodder crops	Total non-food crops	Total area under irrigated crops
1	2	3	4	5	6	7	8
	District total	7,435	282	21	5,415	13,391	37,594
1	Okhamandal	..	..	..	79	96	387
2	Kalavad	898	..	..	486	1,576	5.036
3	Jamnagar	119	95	..	537	756	5,470
4	Khambhalia	830	167	..	756	1,779	5,151
5	Jamjodhpur	3,815	..	21	708	4,543	6,813
6	Dhrol	28	..	..	422	450	1,583
7	Kalyanpur	567	..	..	2,086	2,653	7,025
8	Jodiya	..	..	..	246	246	1,292
9	Bhanvad	1,042	..	..	..	1,042	2,782
10	Lalpur	136	..	..	95	250	2,055

Source :
Director of Agriculture, Gujarat State, Ahmedabad

CHAPTER V

INDUSTRIES

OLD TIME INDUSTRIES

Till the latter half of the 19th century, the economic structure mainly consisted of agriculture supplemented by traditional crafts and handicrafts plied by local artisans and craftsmen some of whom acquired the highest degree of perfection and artistic excellence. Even to this day agriculture occupies a very prominent place in the economy of the district and provides means of livelihood to 60 per cent of the working population. The important crafts which flourished in those days in this district were printing of *bandhani* by tie and dye method, manufacture of salt, gold thread and brocade. Referring to the importance of *bandhani*, the *Statistical Account of Nawanagar* states :

> "The cloth trade of Nawanagar was formerly very brisk, as the art of printing in colours by the method called Bandhni, a most laborious and expensive process, is there carried to great perfection. Specimens were, however, sent to the exhibitions at Bharuch and S. Kensington, and in a year or two imitations came out from Manchester, etc., printed in fast colours, at about fifteen to twenty times less cost. The Nawanagar manufacture of Bandhni cloth was at once extinguished, and supplanted by the article of European manufacture, and it only now survives on any large scale for orders, as Rajas and great men consider it fitting to give their sisters, wives, and daughters, cloth of this description. But the trade is doomed as is the manufacture, and in a few years the very method of manufacture will be forgotton."[1]
>
> About the salt industry the *Account* observes ; "The revenue realised from Salt manufactured in the Nawanagar State for 1877, was 40,000 Koris, or about Rs. 12,000. This includes the works at Ghorajhar, Ganga, Pindara, Bedi, Chavadapat, Hariana, Balambha, Manamora, Jhinjhoda, and the Barari Ran. The works are annually farmed to the highest bidder, the farmer being bound to furnish the darbar and certain officials and darbari servants with salt gratis. The salt manufactured at these works is of the kind called ghasia, and is manufactured by Majothis, a tribe of Muhammadan potters."[2]

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1 WATSON, J. W., *Statistical Account of Nawanagar*, Bombay, p. 13, 1879

2. *Ibid.*, p. 14

As will be seen later, despite the pessimistic note voiced above, *bandhani* printing by tie and dye method and other crafts like jari embroidery, crochet work, *atlas* weaving and manufacture of nutcrackers, pen-knives and scissors,[1] survive to this day and are in greater demand than ever before.

INDUSTRIALISATION

Industrialisation is quite a recent phase in the economic development of the country and its various regions. Industrial activity in the modern sense of the term, however, commenced during the second half of the nineteenth century. In Gujarat and Saurashtra, the first step in the direction of industrialisation aided by mechanical devices was taken in the textile industry as cotton happened to be the most important raw material grown in this part of the country. Mechanisation was first introduced in ginning and pressing factories followed by textile mills, either spinning or both spinning and weaving.

In the present century though the pace of industrialisation was accelerated by the successive World Wars, the real impetus was received only after Independence, when the national policy was enunciated and various schemes for the promotion of industrial growth and development in the country formulated with a view to remove the existing imbalance between agriculture on the one hand and non-agricultural pursuits on the other. In the result a number of new industries have come into existence in the district besides expansion of those that already existed in the past. Mechanisation has been increasingly resorted to as evidenced by the ever increasing demand for power and replacement of old established crafts manually operated by those mechanically worked. Handicrafts and small industries which are no less important in the context of industrialisation and employment potential have also had their share of development through various measures the Government have taken for their expansion and promotion by adopting modern means of manufacture and use of power.

Industrial development in Jamnagar district was mainly confined to the State of Nawanagar, as a result of the progressive policy pursued by its rulers. "The foundation of the first cotton mill in Saurashtra was laid as early as January 2, 1865 in the Nawanagar State. But the company ended in failure even though it was backed and sponsored by interests that had a successful record of mill management in Bombay."[2] To promote

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1. These crafts have been described in detail in the section on 'Industrial Arts of this Chapter.
2. Government of Saurashtra, *Saurashtra Textile Mills Enquiry Committee Report*, p. 5, 1955

commerce and industries, a separate Department of Commerce and Industries was created in 1918 which helped establish a number of new industries in the State.

The statement given below compares the growth of industries between 1907 and 1931.

Sl No.	Name of the industry	Years 1907	1931
1	2	3	4
1	Ginning factories	3	13
2	Cotton presses	..	2
3	Printing presses	3	13
4	Saw mills	..	2
5	Flour mills	1	33
6	Oil mills	..	16
7	Decorticators	..	40
8	Railway workshop	..	1
9	Salt works	3	6
10	Brass metal works	1	3
11	Miscellaneous	1	32
	Total	12	161

Source :

SHAH, M. H., *Jam The Great*, p. 90, 1934

The industrial development received further impetus as several industrialists from outside decided to take advantage of the various facilities and liberal concessions offered by the Nawanagar State. The industries thus established were cement, cotton textiles, woollen textiles, etc. Another important factor responsible for the industrial development of the district was Bedi Port equipped with all modern facilities for the transport of goods. Besides Jamnagar, other centres which assumed industrial importance were Dwarka and Mithapur in Okhamandal taluka which then formed part of Baroda State. The Dwarka Cement Works were established at Dwarka in 1921 and Tata Chemicals Ltd. came into being at Mithapur in 1939

During the Second World War, the Digvijay Spinning and Weaving Mills Ltd. a cotton textile mill established at Jamnagar in 1942, has gone out of production since 1954. Indian Hume Pipe Co. Ltd. also started its factory at Jamnagar in 1942 for the manufacture of hume pipes. The Digvijay Tiles and Pottery Works was started in 1944, while the manufacture of paints and varnishes had commenced earlier in 1939.

After Independence the district witnessed the establishment of several large scale factories which numbered 33 in 1964. The Digvijay Woollen Mills was incorporated in 1948. The Brooke Bond India Private Ltd. opened its processing factory in 1951. The Bharat Engineering Works were established in 1951. Kanti Oil Mills. an important large scale factory, was

established in 1956, and had a solvent extraction plant added to it in 1962. A number of small industries manufacturing plastic buttons, brass spares, oil-engines, plastic novelties were also established during this period.

The foregoing account reveals steady expansion and diversification of industries by the establishment of small and large scale concerns which have ample opportunities for successful operation either through the exploitation of local resources or by the utilisation of raw materials from outside. This process has been further encouraged by the development of transport facilities and means of communications within the district and outside in recent times.

POWER

The economic prosperity of a region can be measured in terms of its industrial development and agricultural growth which are in their turn mainly dependent upon the generation and consumption of power by industry and agriculture. Prior to integration the power position in the peninsula was far from satisfactory and was confined to a few States which had started power houses for lighting their capital and principal towns. After the formation of the State of Saurashtra, demand for power supply was on the increase and almost all the power houses had to resort to staggering of load to cope with the growing demand.

The Nawanagar State owned a diesel power station with a capacity of 335 kW. which supplied electricity to Jamnagar. Later with the setting up of a cement factory at Sikka, two turbo sets of 4,000 kW. each were installed at Sikka and the Sikka Power House started functioning with an installed capacity of 8,000 kW. The city of Jamnagar also received power from Sikka Power House in addition to the diesel power station at Jamnagar. But the expansion of the cement factory made greater demands on its limited power supply with the result that power shortage was again felt. Requisitions for power supply were also received from Digvijay Woollen Mills, Digvijay Pottery Works, defence services and several other industrial consumers. The capacity of the thermal station at Sikka was, therefore, raised to 16,000 kW. in the beginning of the Second Five Year Plan.

Till 1st March, 1954 all the activities for the development of power were undertaken by the Electricity Department. From 1st March, 1954 a statutory body, namely, the Saurashtra Electricity Board was constituted. As the control of Government power houses and the execution of the approved development programme were now vested in the Board, it pursued the implementation of various schemes with vigour. In the result power houses were built at the taluka headquarters of Jamjodhpur, Khambhalia, Jodiya and Bhanvad.

During the Second Five Year Plan 23,000 kW. diesel generating sets were installed in the Jamnagar power house. Further sets of 250 kW. and 350 kW. were installed at Jodiya and Khambhalia. During the Third Five Year Plan the district also started receiving power from the Dhuvaran Thermal Power Station, which had a generating capacity of 254 MW. The power station has four turbo-generating sets with a capacity of 63·5 MW. each. The power from this station is transmitted to the main receiving centres at Vatva near Ahmedabad, Gotri near Baroda, and Gondal and Dhasa in Saurashtra. The power to Gondal is transmitted through 132 KV. D/C transmission line from central power station of Dhuvaran. From Gondal it is further transmitted to Jamnagar through 66 KV. S/C transmission line, the construction work of which was completed during the Third Five Year Plan.

The statement given below compares the consumption of electricity according to purpose in million kWh. in 1950-51, 1955-56, 1960-61 and 1965-66.

Consumption of Electricity by Purpose

(IN MILLION KWH.)

Year 1		Domestic consumption 2	Commercial light and small power 3	Industrial power 4	Other purposes 5	Total utilisation of electricity 6
1950-51	..	1.163	..	12.760	0.153	14.076
1955-56	..	1.922	..	24.740	0.264	26.926
1960-61	..	2.907	..	48.970	4.863	57.740
1965-66	..	4.090	1.980	65.550	14.320	85.940

Source :

1. Census of India 1961, Vol. V, Gujarat, Part 1-A (III). *General Report on the Census, Economic Trends and Projections*
2. Bureau of Economics and Statistics, Gujarat State, Ahmedabad, *District Statistical Abstract*, Jamnagar, 1961-62
3. The Secretary, Gujarat Electricity Board, Baroda

The above statement discloses a rapid rise in the use of electric power for various purposes from one quinquennieum to another. The total consumption of electricity has increased six times between 1950-51 and 1965-66. The main consumer of electrical energy is the industrial sector where consumption of power has increased from 12,760 million kWh. to 65,550 kWh. during the last 15 years, and accounted for 76·27 per cent of the total consumption in 1965-66 as a result of growing industrialisation in the district.

Factories and Workshops by Type of Power or Fuel used—The use or otherwise of power helps in getting a proper perspective of the trend of mechanisation in industry and also reveals the relative importance of traditional crafts in the industrial structure of the district. In every 1,000

establishments that are in operation in the district 292 are worked by various forms of power and 708 without power. The following table shows the distribution of establishments and persons employed according to kind of power or fuel used in 1961 as returned by the Housing and Establishment Census.

Distribution of Establishment and Persons Employed According to Kind of Power or Fuel Used, 1961

Total/Rural/ Urban	Kind of power or fuel used	No. of units	No. of persons employed	No. of persons employed per unit
1	2	3	4	5
Total	**Electricity**	**433**	**4,576**	**10.57**
	Liquid fuel	**399**	**2,008**	**5.04**
	Coal, wood and bagasse ..	**294**	**1,543**	**5.35**
	Other power	**7**	**49**	**7.00**
	No power	**2,744**	**6,923**	**2.53**
Rural	Electricity	15	138	9.20
	Liquid fuel	283	869	3.07
	Coal, wood and bagasse ..	68	168	2.47
	Other power	..	..	..
	No power	1,584	3,568	2.20
Urban	Electricity	418	4,438	10.62
	Liquid fuel	116	1,139	9.65
	Coal, wood and bagasse ..	226	1,355	6.00
	Other power	7	49	7.00
	No power	1,160	3,355	2.61

Source :

Census of India 1961, Vol. V, Gujarat, Part IV-B, (*E Series Tables*), *Housing and Establishment Tables*

Out of a total number of 3,877 establishments worked by various forms of power, 2,744 or 70·77 per cent do not use any power or fuel. Of the rest, 433 are worked by electricity, 399 by liquid fuel, 294 by coal, wood and bagasse and 7 by other power. The statement further goes to show that among the various types of power used, electricity is the least in use and the liquid fuel the most in rural areas. But in towns it is electricity which takes precedence among the various forms of power followed by coal, wood and bagasse and liquid fuel used in the urban establishments operating in the district where mechanisation is being increasingly resorted to to replace manual power employed hithertofore. The same order is revealed also in the extent of employment offered by establishments operated by the different categories of power or fuel in towns. The greater use of liquid fuel in villages is very well accounted for by the growing use of water pumps for well irrigation as well as other factories which came into being when electricity was not in use. Units worked without power claim the maximum number both in rural and urban areas. Their predomience in the economy of the district reflects the persistence of traditional craftsmen and artisans, who are in equal demand both in villages and towns, though comparatively greater in the former than in the latter.

Among the various types of industrial establishments, those which have maximum use of electricity are the establishments manufacturing chemicals and chemical products, machinery (all kinds other than transport) and electrical equipment and beverages. Electrically operated industries which are important as giving maximum opportunities of employment are production of edible fats and oil (other than hydrogenated oil), and production of rice, *atta*, flour, etc. Industries using liquid fuel and giving maximum employment are also engaged in the production of rice, *atta*, flour, etc., followed by production of edible fats and oils (other than hydrogenated oil). Industries important from the point of employment in units which do not use power or fuel and are manually worked are crafts in which traditional artisans like carpenters, weavers, tailors, etc., are engaged. These figures disclosed withal the pace of mechanisation, gradual elimination of manual power and increasing demand of electricity in preference to other forms of power or fuel like coal, wood and bagasse and liquid fuel. It is worthy of note that the industries which have been increasingly resorting to the use of power are the industries which are being gradually mechanised by replacing manual power, which was the motive power for village and cottage industries at the commencement of the present century. These are production of rice, *atta*, flour, etc., edible fats and oil, manufacture of brass and bell metal products, etc.

Rural Electrification—The table given below shows the progress made in rural electrification.

(IN NUMBER)

Year	Towns	Villages	Total
1	2	3	4
1950-51	4	..	4
1960-61	7	20	27
1965-66	13	46	59

Source :
1. Census of India 1961, Vol. V, Gujarat, Part I-A (i.I), *General Report on the Census, Economic Trends and Projections*
2. The Secretary, Gujarat Electricity Board, Baroda.

While in 1950-51 it was the urban areas which alone were electrified, increasing attention is being paid to rural electrification during the Second and Third Five Year Plans.

MINING

The known mineral wealth of Jamnagar district is substantial. The minerals available in the district include bauxite, calcite, gypsum, limestone, calcareous sand sea sand, building stone, road metal, etc. Bauxite deposits are located in Kalyanpur taluka. Recent investigations by the Geological Survey of India have revealed that these deposits are pockety in nature. On a conservative estimate probable reserves of bauxite have been

estimated at 10 million tonnes. The material is very suitable in the aluminium refractories and chemical industries. Gypsum which is another important mineral found in the district is useful in the manufacture of fertilisers, sulphuric acid, plaster of Paris, cement, paints, crayon and paper and also as a natural fertiliser. The Ran area in the district is estimated to contain 3,837,000 tonnes of gypsum within a depth of 15·24 metres. Calcite deposits are in substantial quantities. The material is used as filler in powder from in rubber, textiles, paper, etc. It is also used in glass works and sugar and as metal polish.

The total value of minerals produced in the State as a whole in 1964 came to Rs. 5·58 crores of which those worth Rs. 71·96 lakhs or 12·89 per cent were extracted in this district. The sub-joined statement gives figures of the minerals produced in the years 1962 and 1964.

STATEMENT V·1

Quantity, Value and Labour Employed in Mineral Production in Jamnagar District

Sl. No.	Mineral	Production in tonnes		Value in Rs.	
		1962	1964	1962	1964
1	2	3	4	5	6
1	Bauxite	280,158	89,943	3,362,000	932,000,
2	Calcareous sand ..	267,640	319,069	N. A.	1,650,000
3	Calcite	1,605	1,920	10,000	15,000
4	Gypsum	125	..	2,000	..
5	Lime-stone	260,691	2,119,121	1,303,000	1,272,681
6	Sea sand	386,354	466,435	N. A.	2,411,000
7	Building stone ..	15,240	178,400	24,000	578,818
8	Chalcedony	..	85	..	1,020
9	Kankar	..	35,004	..	70,008
10	Murium	..	46,799	..	93,598
11	Sand	..	48,208	..	48,206
12	Road metal	12,193	41,455	60,000	124,353
	Total	**1,224,006**	**3,346,438**	**4,761,000**	**7,196,684**

N. A.=Not available

Source :

Government of Gujarat, *Annual Administration Reports of the Director of Geology and Mining*, for the years 1962-63 and 1964-65

Gujarat Mineral Development Corporation Ltd.—The Gujarat Mineral Development Corporation Ltd. has been set up by the Government of Gujarat as a State undertaking on 15th May, 1963 and registered as a private limited company under the Companies' Act, 1956 with the object of exploiting the mineral resources of Gujarat. It started with an initial authorised capital of Rs. 50 lakhs which has now been raised to Rs. 200 lakhs. The issued and subscribed capital amounts to Rs. 74 lakhs which has been fully subscribed by the Government of Gujarat. Its primary aim is to act as a body interested in setting up and regulating some mineral based industries so as to ensure maximum benefits to the public. The

Corporation has already undertaken two projects, viz., (1) Glass Sand Project at Vavdi village of Surendranagar district, and (2) Florspar Project at Amba Dungar in Baroda district. An alumina plant is also proposed to be set up near the bauxite deposits found in Kutch district. No such work is, however proposed to be taken up in Jamnagar district in the near future.

INDUSTRIES

Industrial Establishments—The 1961 Census has given out important data relating to industrial establishments by undertaking for the first time a complete Census of industrial establishments in the country. According to this Census, Jamnagar district has returned a total number of 3,877 establishments engaged in the production of goods and employing 15,099 persons in the various branches of industry operated on household as well as non-household basis.

Statement V·2 given at the end of the Chapter shows the importance of establishments manufacturing other wood and allied products, various branches of textile industry including making of garments, production of rice, *atta*, flour, etc., manufacture of jewellery, silverware, and wares using gold; manufacture of sundry hardware such as wire, bolt, screw, bucket, etc., textile mills, cotton ginning, etc. The other industries worthy of note are manufacture of shoes and other leather products, production of other food products such as sweetmeat and condiments, production of edible fats and oils, manufacture of brass and bell metal products, repairing of bicycles and tricycles. While there is an appreciable degree of diversification in industries, traditional artisans and craftsmen such as carpenters, tailors, goldsmiths, shoemakers, etc., are still found to hold their ground despite growing mechanisation of industries.

Household vs. non-Household Industries—Statement V·3 given at the and of the Chapter classifies workers in agriculture, mining, quarrying, manufacturing, etc., into household and non-household industries.

According to the 1961 Census the total number of workers employed in all the industrial divisions other than cultivation of land is 122,977 of whom 23,205 or 18·86 per cent work on household basis and 99,772 or 81·14 per cent on non-household basis. Manufacturing industries claim 36,361 of whom 12,972 or 35·68 per cent are workers at household industries and 23,389 or 64·32 per cent in non-household industries. Among other manufacturing industries, chemicals and chemical products account for the largest number, i.e., 6,840 of whom 6,796 work at non-household industries and 44 at household industry. Next in importance are non-metallic mineral products other than petroleum and coal which employ 6,749 persons. Textile cotton and textile miscellaneous also account for 6,261.

HOUSEHOLD INDUSTRIES

Industries which are amenable to working on household basis are shown in the following statement giving sample households engaged only in household industry, classified by principal household industry in Jamnagar district.

STATEMENT V·4

Households Classified by Major Groups of Principal Household Industry and Number of Persons Engaged

(Based on 20% Sample)

Sl. No.	Household industry (division and major group only of I. S. I. C.)	Total/ Rural/ Urban	Total No. of house-holds	Households engaged in household industry according to the number of persons engaged				
				1 person	2 persons	3-5 persons	6-10 persons	More than 10 persons
1	2	3	4	5	6	7	8	9
	Total	**T**	**2,246**	**1,038**	**665**	**508**	**34**	**1**
		R	**1,846**	**822**	**562**	**433**	**28**	**1**
		U	**400**	**216**	**103**	**75**	**6**	..
1	Agriculture, livestock forestry, fishing and hunting	T	905	349	281	255	20	..
		R	759	288	235	219	17	..
		U	146	61	46	36	3	..
2	Livestock and hunting	T	863	327	269	247	20	..
		R	731	275	227	212	17	..
		U	132	52	42	35	3	..
3	Mining and quarrying	T	2	2	..	..	..	..
		R	2	2	..	..	..	.
		U	..	..	..	..	..	..
4	Manufacturing ..	T	1,339	687	384	253	14	1
		R	1,085	532	327	214	11	1
		U	254	155	57	39	3	..
5	Textile-cotton	T	193	82	67	44	..	..
		R	170	71	59	40	..	..
		U	23	11	8	4	..	..
6	Textile-miscellaneous ..	T	149	93	37	18	1	..
		R	115	62	36	16	1	..
		U	34	31	1	2	.	..
7	Manufacturing of wood and wooden products	T	231	133	61	37	..	..
		R	200	112	54	34	..	..
		U	31	21	7	3	..	..
8	Leather and leather products	T	218	119	56	37	3	1
		R	186	103	49	30	3	1
		U	30	16	7	7	..	..
9	Non-metallic mineral products other than petroleum and coal	T	238	69	89	73	7	..
		R	201	61	75	60	5	..
		U	37	8	14	13	2	..

I. S. I. C.=Indian Standard Industrial Classification

Source :

Census of India 1961, Gujarat, Vol. V, Part III, *Household Economic Tables*

These figures throw valuable light on the households employed in household industry. 59·62 per cent of the households, engaged only in household industries work at manufacturing industries, textile being the most

important among them, followed by non-metallic mineral products other than petroleum and coal, woodcrafts and leather and leather products. Next in importance is agriculture, livestock, forestry, fishing and hunting. 40.21 per cent of the households, engaged in household industries work at agriculture, livestock, forestry, fishing and hunting, 95·37 per cent of whom work at livestock and animal husbandry, including hunting. The table illustrates further that the household basis of work is all the more important in traditional crafts wherein the village artisans and craftsmen like weavers, carpenters, shoemakers, blacksmiths, potters, etc., are engaged. Another important feature of household industries is the extent of employment offered by them. While a majority of them are single member establishments, the strength of those wherein two to five persons are engaged is fairly large as the assistance of the members of the household is an essential prerequisite of a household industry. The strength of households employing more than 5 persons, the statement reveals, to be comparatively much less. The greater concentration of household industries in rural areas as compared to towns where the number of such households is relatively less is really significant in that the traditional artisans are more in demand in villages than in towns, where the gradual mechanisation of industry has been eliminating them to a far greater extent than in the countryside.

Trends of Industrial Development—The trends of industrial development during the last decade 1956-66 are reflected in the number of factories and workers compared in Statement V·5 given at the end of this Chapter. The statistics for the years 1956 and 1960 have been reproduced from the monograph "*Location of Industries in Gujarat State*, 1956-60" published by the State Bureau of Economics and Statistics, and those for the year 1966 have been obtained from the Chief Inspector of Factories, Ahmedabad. The total number of factories has risen from 98 in 1956 to 148 in 1960 and to 188 in 1966. As against an appreciable increase in the number of factories during this period, the corresponding increase in employment was negligible, as it rose slightly to 11,801 in 1966 from 11,175 in 1956. Reviewing the progress made during the first half of this decennium, it is noticed that though the total number of factories in the district had risen during the quinquennium 1956-60 the total number of workers employed in them decreased during the same period. This overall decrease in employment was due to decrease in employment of large scale factories particularly in the manufacture of cement, railroad equipment and their repairs, spinning, weaving and finishing of textiles and manufacturing industries not elsewhere classified. The industries which have made substantial contribution to providing employment in 1966 are (1) manufacture of miscellaneous food preparations (3,236), (2) basic chemicals including fertilizers (2,521), (3) manufacture of cement (1,199), (4) spinning, weaving and finishing of textiles (1,140), and (5) manufacture of machinery (except electrical machinery) (1,073). The other industries

worth mention are manufacturing industries not elsewhere classified, manufacture and repair of railroad equipments, electric light and power, gins and presses, manufacture of structural clay products, manufacture of metal products (except machinery and transport equipment), petroleum refineries, ship building and electrical machinery, apparatus, appliances and supplies.

Agro-based Industries—Among the numerous crops raised in the district oil-seeds and cotton are of major industrial importance. Hence the industrial development which has already taken place in the district is based directly or indirectly on these raw materials, as evidenced by the yield of crops of industrial importance given below.

Sl. No.	Name of the crop	Area (in hectares)	Year 1964-65 (yield in 00' tonnes)
1	2	3	4
1	Groundnuts	312,204.32	1,991
2	Cotton	23,608.17	174*
3	Sesamum	8,475.34	16
4	Sugar-cane	5,065.86	280
5	Castor-seeds	931.10	1

* Cotton production in hundred bales of 365.78 kg. each.

Source :

Directorate of Agriculture, Ahmedabad

Groundnut which is the most important industrial crop in the district has contributed to the extensive growth of oil milling industry in the district.

LARGE SCALE INDUSTRIES—The progress made by the large scale industrial units in the district is reflected in the results of Annual Survey of Industries for the year 1964. Factories employing 50 or more workers using power and 100 or more workers without power are covered on complete enumeration basis. The main features of industrial growth in Jamnagar district for the year 1964 are given in the table below.

Large Scale Factories, 1964

Sl. No.	Items	Unit	Jamnagar district
1	2	3	4
1	Number of factories	Number	34
2	Productive capital	Rs. in (000)	179,734
3	Persons employed	Number	9,931
4	Output	Rs. in (000)	322,716
5	Net value added by manufacture ..	Rs. in (000)	62,014

Source -

Bureau of Economics and Statistics, *Quarterly Bulletin of Economics and Statistics*, Vol. VII, No. 4, October-December, 1967, Ahmedabad, p. 126

The major large scale industries are food including oil, manufacturing, spinning, weaving and finishing of textiles, cement, chemicals cotton ginning and pressing, manufacturing of non-metallic products, manufacture of railroad equipments, etc.

Registered Factories—The total number of registered factories according to the returns furnished by the Chief Inspector of Factories is found to be 173 in 1965 of which 12 are in the public sector and 161 in the private sector. Their break-up according to the industrial classification is given in the statement that follows together with the average number of workers employed daily. Among the factories in the private sector 154 were working in 1965 and 7 were closed.

STATEMENT V.6

Registered Factories and Workers, 1965

Sl. No.	Name of industry	Total No. of registered factories	No. of working factories	No. of working factories sub-mitting returns	Average No. of workers employed daily in working factories
1	2	3	4	5	6
	I—PUBLIC SECTOR				
1	Product of petroleum and coal ..	1	1	1	30
2	Transport equipments	4	4	4	659
3	Electricity, gas and steam ..	7	7	6	166
	Total	*12*	*12*	*11*	*855*
	II—PRIVATE SECTOR				
1	Processes allied to agriculture (gins and presses)	10	10	9	431
2	Food except beverages . ..	73	68	57	4,104
3	Textiles	3	3	3	1,005
4	Wood and cork except furniture ..	1	1	1	15
5	Furniture and fixtures	1	1	1	16
6	Paper and paper products ..	1	1	1	9
7	Chemicals and chemical products ..	4	4	4	1,661
8	Products of petroleum and coal .	3	3	3	279
9	Non-metallic mineral products (except products of petroleum and coal)	12	10	7	1,547
10	Basic metal industries	2	2	2	1,530
11	Metal products (except machinery and transport equipment) ..	12	12	10	278
12	Machinery (except electrical machinery)	11	11	10	353
13	Electrical machinery, apparatus, appliances and supplies .	8	8	7	100
14	Transport equipments	1	1	1	20
15	Miscellaneous industries ..	19	19	18	396
	Total	*161*	*154*	*134*	*11,744*
	Grand Total	**173**	**166**	**145**	**12,599**

NOTE:

Average number of workers employed daily is shown for the working factories.

Source :

Chief Inspector of Factories, Gujarat State, Ahmedabad

Registered Factories and Workers—The most important registered units from the point of number are food except beverages (73), miscellaneous (19), non-metallic mineral products (except products of petroleum and coal) (12), metal products (except machinery and transport equipments) (12), machinery (except electrical machinery) (11), and processes allied to agriculture (gins and presses), (10). The establishments important from the point of employment as determined by the average number of workers employed daily are in order : food except beverages, chemicals and chemical products, non-metallic mineral products, basic metal industries, textiles, processes allied to agriculture, miscellaneous industries, and machinery (except electrical machinery).

Establishments in the public sector include products of petroleum and coal, transport equipments and electricity, gas and steam.

The industries in operation cover a fairly wide range of products manufactured in Jamnagar district based either on local raw materials like cotton, groundnut, salt, structural clay and stone, wool, moulding sand, etc., or on metals such as brass, copper and iron, wood, chemicals, and plastic sheets imported from outside. The extensive growth of groundnut in recent times is responsible for a number of oil mills located at certain favourable places like Jamnagar, Khambhalia, Bhanvad, Salaya and Kalavad. The solvent extraction industry has also developed side by side and is located in Jamnagar city. Due to the availability of raw materials like lime-sone and gypsum, manufacture of cement has made good progress. Of the two important cement factories in the district one is at Dwarka and other at Sikka. Another important industry is textiles which include a cotton textile mill, a woollen mill and 10 ginning and pressing factories. Jamnagar district with a scanty rainfall and barren lands along the seacost is an ideal place for the manufacture of salt and chemicals. Among other industries potteries, brass parts, paints, oil-engines, etc., claim an important place in the industrial structure of the district.

Particulars of the most important among large scale industries are given below.

1 *Harshad Textile Mills Private Ltd., Jamnagar*—The Harshad Textile Mills was started at Jamnagar in 1947. The mills had 149 looms employed 199 persons and disbursed Rs. 420,809 as wages and salaries in 1965. It manufactured such varieties of cloth as taffeta, georgette, nylon, satin, etc., valued at Rs. 2,925,366 in that year. The cloth is exported to Bombay and foreign countries like Sudan, England, Cyprus, Singapore, etc.

2 *Shri Digvijay Woollen Mills Ltd., Jamnagar*—This woollen textile unit was incorporated in the year 1948 and started production in 1951. It has 90,662 spindles and 184 looms, out of which 44 are automatic. With a

fixed capital of Rs. 7,455,964, it provided employment to 1,006 persons and disbursed Rs. 1,828,157 as wages and salaries in 1965. Woollen textiles, rugs, blankets, etc., valued at Rs. 11,010.024 were manufactured in 1965 and marketed all over India and also exported to U. S. S. R.

3 *The Associated Cement Companies Ltd., Dwarka Cement Works, Dwarka*—The Dwarka Cement Works were started in 1921. It had a fixed capital of Rs. 24,929,657, employed 761 persons, disbursed wages and salaries to the tune of Rs. 3,118,302, and manufactured 314,000 metric tonnes of portland cement valued at Rs. 37,884,100 in the year 1965-66. The cement manufactured by this unit is consumed at various places in Gujarat, Maharashtra, Rajasthan, Mysore and Delhi.

4 *Shree Digvijay Cement Company Ltd., Sikka*—Incorporated as a public limited company in November, 1944, the first plant with a rated capacity of 1·20 lakh tonnes was commissioned in 1948. Its rated capacity was increased to 2·40 lakh tonnes by the addition of an indentical plant in 1953. Two more schemes for the expansion of its capacity by 2 lakh tonnes each were completed in 1953 and 1956 respectively. This raised its aggregate capacity to 6.40 lakh tonnes. It had a fixed capital of Rs. 57,911,155, provided employment to 968 persons disbursed Rs. 4,714,253, as wages and salaries and manufactured 420,940 tonnes of cement valued at Rs. 38,921,748 in the year 1964. Cement is sent to various places in Gujarat, Maharashtra, Goa, Rajasthan and Delhi.

5 *Tata Chemicals Ltd., Mithapur*—The Saurashtra region possesses two important raw materials, viz., salt and lime-stone, which are vitally essential for the manufacture of soda ash and caustic soda. The demand for soda ash is increasing rapidly. Glasswares of all types, soap, pulp and paper, detergents, textiles, drugs and petroleum products are some of the many industries which require soda ash in their manufacture. Tata Chemicals Ltd., is important among the factories engaged in manufacturing chemicals in the district. The original concern named Okha Salt Works Ltd., established in 1927, was taken over by the Tata Chemicals Ltd., in 1939. The works are situated at Mithapur near Port Okha at the extreme tip of the district as also of the peninsula of Saurashtra. The works are planned on an ambitious scale with a view to supplying large part of Indian requirements of soda ash and other chemicals and over an area of 6,000 acres. Salt and residual liquor left after its separation from sea-water known as bitterns form the basic raw materials from which a variety of chemicals are manufactured. In 1965-66 the total fixed capital of the factory was Rs. 1,120·94 lakhs. It employed 2,627 persons and disbursed Rs. 67·96 lakhs towards wages and salaries. The products manufactured included salt, soda ash, caustic soda, sodium bicarbonate, benzene, hexachloride and alkalies marketed all over India. The total value of production in 1965-66 was Rs. 957.9 lakhs.

6 *The Nawanagar Salt and Chemical Industries, Salaya*—The works are situated on the north coast near Salaya in the district at a distance of about 51.50 km. by sea from Bedi Port and cover a total area of about 865 acres. The fixed capital of the company was Rs. 373,227 in 1965 and the total number of persons employed by it was 205. The total wages and salaries distributed amounted to Rs. 192,970. It manufactures salt and gypsum. The total production of salt and gypsum was 21,507 tonnes valued at Rs. 492,810.

7 *The Digvijaysinhji Salt Works Private Ltd., Jamnagar*—The works are situated west of Bedi Port at a distance of about 11.30 km. from Jamnagar city and cover an area of about 986 acres. The fixed capital of the works was Rs. 1,098,892 in 1966 and the concern employed 500 persons. The total wages and salaries disbursed amounted to Rs. 383,096. It manufactured 92,537 metric tonnes of salt and 5,178 metric tonnes of gypsum valued at Rs. 1,385,355 and Rs. 77,670 respectively. The products are marketed in Gujarat, Maharashtra, Punjab, Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh, Assam and Bengal. Salt valued at Rs. 477,079 was also exported to Japan in 1966.

8 *Shree Kanti Oil Mills, Jamnagar*—Oil milling, solvent extraction, refining of oils, utilisation of bye-products in the manufacture of soap and fat splitting can be considered as chain processes. Solvent extraction of oilcakes to recover residual oil and obtain practically de-oiled cake, is an important feature of all the processes.

Shree Kanti Oil Mills were established in 1956 and the extraction plant in 1962. Its fixed capital was Rs. 365,000 in 1965 when it employed 121 persons. The total wages and salaries disbursed amounted to Rs. 115,036. The unit has a capacity of 8,700 metric tonnes of oilcake and 10,800 metric tonnes of de-oiled cakes. Its capacity to produce groundnut oil is 1,690 metric tonnes and of solvent extracted oil is 647 metric tonnes. The total production of various products and bye-products and their value in the year 1965 is shown below.

Sl. No.	Type of product	Production in metric tonnes	Value (in Rs.)
1	2	3	4
1	Groundnut oil	3,123	6,451,686
2	Oilcake	5,110	2,558,723
3	Solvent extracted oil	1,945	4,579,606
4	De-oiled cake	28,716	10,928,989
5	Soap stock	312	226,824
6	Sludge	10	3,962
7	Black oil (barrels)	58	16,737

The products are sent to Bombay, Madhya Pradesh, Delhi, Uttar Pradesh, Bengal, Assam and Orissa, Czechoslovakia, German Democratic Republic and U. S. S. R.

9 *New Bharat Engineering Works, Jamnagar*—This engineering unit was started in 1951. It had a fixed capital of Rs. 300,000 in 1966. It employed 240 persons and disbursed wages and salaries to the tune of Rs. 255,000. It manufactured 2,351 diesel oil-engines valued at Rs. 4,318,000, 174 lathes valued at Rs. 1,071,000 and 14 drills valued at Rs. 87,000 in 1966. Oil-engines were for the most part marketed particularly in Gujarat State, while lathes and drills in parts of the country.

10 *Brooke Bond India Private Ltd., Jamnagar*—This factory for processing tea was started at Jamnagar in 1951. It had a fixed capital of Rs 730,285 and employed 323 persons in 1965. The total amount of wages and salaries disbursed was Rs. 946,979. The factory is engaged in processing tea. It packeted 5,566,790 kg. of tea valued at Rs. 33,219,504, which was marketed all over India.

SMALL SCALE AND COTTAGE INDUSTRIES—Since complete data regarding the distribution of small scale industries in the district are not available the results of the survey carried out by the Bureau of Economics and Statistics are summarised below, as they will be helpful in having some idea of the stage of development in this sector of industry. The survey was undertaken by the State Bureau of Economics and Statistics in all the districts of Gujarat except Dangs and was spread over two years, 1959-60, and 1960-61. It aimed at (i) obtaining districtwise estimates of income of families engaged in selected cottage and small scale industries and (ii) collecting information on other related aspects such as employment, production and consumption of raw materials.[1]

> " An establishment was classified as cottage industry, if the number of persons engaged in it on any day during the year was 9 or less. If the number was 10 or more and the unit was not registered under the Factories Act, the establishment was classified as a small scale establishment whether it was power operated or not. Ordinarily industrial units employing 10 or more workers and using power would be registered under the Factories Act. However, if at the time of the inquiry such a unit was not registered, it was included in the survey. "[2]

1 *Quarterly Bulletin of Economics and Statistics*, Vol II, No. 1, January-March, 1962

2. *Ibid*, p. 1

The survey carried out was a sample survey covering the following sixteen industries in the cottage and small scale sector.

1 Weaving
2 Dyeing and printing
3 Jari thread works
4 Blacksmithy
5 Metal works (silver, brass, copper and bell)
6 Carpentry
7 Cane and bamboo products
8 Bricks and tiles
9 Other potteries
10 Leather working and tanning
11 Oil pressing
12 *Gur* making
13 Bee keeping
14 Soap making
15 Match making, and
16 Paddy husking

For the purpose of survey the centres were classified into strata A, B, and C. Stratum 'A' was related to centres important for different industries. Stratum 'B' to urban areas other than those covered by 'A' and stratum 'C' consisted of groups of 4 to 5 villages in the rest of the rural areas, from which about 4 per cent of the group villages were selected for the purpose of this survey.

Distribution of Establishments by Industry—There were in all 8,283 establishments in the 16 industries surveyed in the district, out of which 7,959 or 96·1 per cent were in the cottage and 324 or 3·9 per cent in the small scale sector. Of the 16 selected industries in the district (1) carpentry, (2) other potteries and (3) metal work account for the largest number of establishments 1,708, 1,178 and 1,021 respectively. Others in order of importance are leather working and tanning, bricks and tiles and dyeing and printing.

Power vs. No Power- Out of 7,959 cottage industry establishments, only 582 or 7·2 per cent were operated with power and 7,377 or 92·7 per cent without power. In the small scale sector 112 or 34·6 per cent of the establishments were operated with power and 212 or 65·4 per cent without power.

Employment- Statements V.7 and V.8 given at the end of the Chapter show the total employment in the small scale sector as well in the cottage industries sector. Employment by both the sectors came to 25,503 persons, of whom 20,464, or 80·2 per cent were members of the household and 5,039 or 19·8 per cent were outsiders. This works out to an average of 3·08 persons per establishment.

Small Industries in Jamnagar City—A survey of industrial establishments not registered under the Factories Act was conducted by the State Bureau of Economics and Statistics in 1965-66. It covered those cities of

Gujarat including Jamnagar which had a population of more than a lakh. The main object of the survey was to prepare a comprehensive and complete inventory of such units which could be useful for subsequent survey to be undertaken in any particular industry. For the purpose of survey a small scale industry engaged in productive activity and also carrying out repairs was defined as one wherein number of persons engaged was not more than 9, if operated by power and not more than 19, if operated without power.

For the purpose of this survey the industries selected were (1) foodstuff, (2) beverages, (3) tobacco products, (4) textile-cotton, (5) textile-jute, (6) textile-wool, (7) textile-silk, (8) textile-miscellaneous, (9) manufacture of wood and wooden products, (10) paper and paper products, (11) printing and publishing, (12) leather and leather products, (13) rubber, petroleum and coal products, (14) chemicals and chemical products, (15) non-metallic mineral products other than petroleum and coal, (16) manufacture of earthen ware and earthen pottery, (17) basic metals and their products except machinery and transport equipment, (18) machinery (all kinds other than transport) and electrical equipment, (19) transport equipment, (20) miscellaneous manufacturing industries and (21) some personal services.

The findings of the survey indicate that there are in all 2,188 industrial establishments in Jamnagar city not registered under the Factories Act. Of these, those engaged in cotton textiles (miscelloneous) number 356 (16·28 per cent), machinery (all kinds other than transport) and electrical equipment, 278 (12·71 per cent), foodstuffs 257 (11·74 per cent), chemicals and chemical products 215 (9·82 per cent), personal services 214 (9·78 per cent) and miscellaneous manufacturing industries 206 (9·42 per cent). Industries other than those mentioned above are basic metals and their products, transport equipment, manufacture of wood and wooden products, etc. which accounted for relatively less share in the industrial development of Jamnagar city. Distinguishing those operating with and without power it is observed that 32·64 per cent were operated with power and 67·36 per cent without power. Only 7 of these were seasonal and the rest permanent. The classification of these establishments according to the type of ownership shows that 82·2 per cent were independent and 17·6 per cent were worked on partnership basis. Co-operative venture accounted for one unit, while one went under the head miscellaneous. Finally, taking power operated and non-power operated establishments together the total number of persons employed per unit was 3·23.

Jamnagar city is the most important centre in the district where most of such industries are concentrated. There are about 600 small scale and cottage units in the city engaged in manufacturing buttons, brass parts,

plastic novelties, small machines and tools, colours and paints, diesel engines and other goods such as steel trunks, body building of rickshaws and automobiles, locks, agricultural implements, metal wares, etc. Button industry, already discussed is an important industry with a country-wide market. Nearly 200 factories in the city manufacture a variety of brass spares needed for electrical equipments, and employ about 2,000 persons.. Besides spares. this industry has earned a name for the manufacture of a number of small special purpose machines for the production of brass components.

Buttons—Button manufacturing is an important industry in Jamnagar, started since 1946. Brass buttons were initially manufactured but their production has considerably declined since 1960 when the manufacture of plastic and nylon buttons in various sizes and colours was taken up. In 1966 there were 150 factories employing 1,800 persons in this industry. The equipment and machinery required for the industry include drilling machines, plastic sheets cutting machines. designing with slotting machine, hole master machine and wooden drums. Most of the machines needed for the industry are designed and manufactured in Jamnagar itself. The raw materials used are acrylic plastic sheets, electroplating chemicals, polishes, etc. About 2,000 kg. of acrylic plastic sheets are used per day. At first full-size acrylic plastic sheets are cut into different pieces with the help of the plastic sheet cutting machine for manufacturing buttons of various sizes. These pieces are then passed through a drilling machine to obtain round pieces of the size of the buttons to be made. The pieces can also be cut into square or triangular shape as may be required. Finishing and proper shaping of the buttons are done by a designing and shaping machine. Different designs on the buttons including the well-known fish-eye design are obtained with the help of slotting machine attached to the designing and shaping machine. Thereafter the buttons are polished in wooden drums by a special process. 2 or 4 holes as may be required are then made in the button, with the help of the hole master machine which makes 2 or 4 holes at a time in one operation. The buttons are then ready for sale. The annual production of buttons is of the order of 5 lakh gross marketed all over India.

Industrial Estates—Industrial estates accord requisite facilities for the development of small scale industries whereby entrepreneurs with small means can obtain built-up sheds or developed plots with all the ancillary facilities of roads, water supply, drainage, electric power. etc., and can also avail of the common facility of other services on spot. It relieves them from the difficulties and delays incidental to the purchase or hire of land at high rates which are at times prohibitive. The scheme of establishing industrial estates has thus served the small industrialist in good stead by dispensing with certain essential preliminaries which are taken in hand in advance and made available on a common basis.

There are two industrial estates at Jamnagar, viz., (1) Small Industries Co-operative Estate Ltd., and (2) Jamnagar Sahakari Udyognagar Sangh Ltd.

The Small Industries Co-operative Estate Ltd., Jamnagar, is the first industrial estate started on co-operative basis in the State of Gujarat and financed under the Life Insurance Corporation Scheme. The Life Insurance Corporation has sanctioned a loan of Rs. 600,000; members contributed Rs. 222,000 by way of share capital, while the State Government has purchased shares worth Rs. 200,000. The construction work is proposed to be completed in two phases. The first phase comprises construction of 43 sheds (22 'A' type and 21 'B' type).[1] The construction work of the first phase is nearly completed and the estate thrown open recently. The second phase of the project comprises construction of 61 sheds (28 'A' type and 33 'B' type) for which the work is to be started from 1967-68. The estate will have 104 sheds in all and the cost of construction is estimated to be Rs. 2,400,000.

Another co-operative estate in the district is the one managed by the Jamnagar Sahakari Udyognagar Sangh Ltd., Jamnagar. The first phase of the scheme as tenchnically approved by the Development Commissioner (SSI), New Delhi envisages construction of 40 factory sheds with service facilities of which two have been completed.

INDUSTRIAL ARTS

Bandhani—Jamnagari *bandhani* is a well-known variety of saree so very popular in Gujarat. It is so known because of the most artistic tie and dye work done at Jamnagar. The art of *bandhani* accompanied the Rajput adventurers from Rajasthan and came to Saurashtra via Kutch. The craft which has been thriving at Jamnagar for the last 450 years was patronised by the Jams who wished to see their newly established capital flourishing and prosperous.

The main raw material is power-loom *mulmul*, georgette, and handloom cloth of different counts. The other raw materials required are colours and chemicals. Yellow, red, and green are the main colours used for dyeing. Since the last 50 years dyeing is done by nepthol and brenthol colours instead of indigenous colours formerly used. Power-loom *mulmul* is purchased locally as well as from Bombay and colours and chemicals can be had from the local market. The average annual cost of cloth required is estimated at Rs. 6 to 7 lakhs and of colours Rs. 1 to 1.25 lakhs.

1 The plot area of each 'A' type shed is 280.13 sq. metres while that of 'B' type shed is 668.90 sq. metres.

Bandhani is the traditional craft of Khatris, both Hindu and Muslim. At present there are about 450 Hindu Brahmakshtriya families and 100 Mohammedan families engaged in this work in Jamnagar. Some of them migrated in the past from Kutch which is also known for this work. The tie work is also done by females but the rest of the processes are done by males. The art of *bandhani* involving tieing and dyeing is complex and requires specialised skill. A piece of cloth-cotton or silk—measuring 5 to 6 yards is first folded in four. The required designs are then printed either by hand or with the help of wooden blocks. It is then tied in tiny knots with thread, whereafter the cloth is dyed in appropriate colours, viz., yellow, red, green, violet. etc. On the completion of this process, when the ties are removed the finished product presents a repeat design in dots in variegated colours. They look as if " beds of flowers are arranged in a garden ". *Bandhanis* are available in a variety of designs, the most important being *bawan bag* (garden of 52 beds), *bar bag* (garden of 12 beds), *kumbhi* and *chokidar*. Other varieties which are popular are *ambadal, basant bahar, kodidana, laheria, kor chundadi, putlivel, popatvel,* and *hathivel*. *Kumbhi*-designed *bandhani* is generally preferred by Muslims.

Bandhanis of 5 to 6 yards and *chundadis* of 2½ yards are manufactured at Jamnagar and are marketed in Saurashtra, Gujarat and Bombay. Certain castes use it as a ceremonial dress for the bride at the time of marriage and also on gay occasions. The average earnings of a worker per day in this craft is Rs. 3·50. *Bandhani* is available in cotton, and georgette and its price varies according to the cloth and workmanship ranging from Rs. 8 to 50 for cotton and Rs. 50 to 250 for georgette, and were more depending upon the intricacy of the design. The demand for *bandhani* has not declined. But the traditional craft now has a competitor in screen and roller printing. By the latter process which is mechanised a large stock of *bandhanis* which are cheaper than the hand made product naturally command a ready market. The average annual value of *bandhanis* manufactured at Jamnagar is estimated to be Rs. 12 to 14 lakhs.

Jari Embroidery[1]—Jari embroidery is one of the oldest handicrafts of Jamnagar. It is said that this art was borrowed from Persia by the artists in India during the times of the Moghul Empire, and brought to Saurashtra by the Muslim migrants from Surat in reign of Aurangzeb. The industry received great encouragement from the ruling families in pre-Independence days, when garments embroidered with *jari* were in great demand. At one time it provided employment to about 1,000 persons. Around midfifties there were 400 to 500 persons engaged in this industry at Jamnagar. But at

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1. All India Handicrafts Board (Planning and Research Section), *Handicrafts of Jamnagar*, 1965

present only 25 households comprising 150 workers are engaged in the industry. The importance of the industry appears to have been on the wane in recent years with the disappearance of patronage of kings, nobles and the well-to-do classes. The traditional customs of giving wearing apparel worked with *jari* to a bride at the time of her marriage is going out of fashion. Besides a shift in the consumer taste, competition with power-looms, prohibitive prices of gold and silver, incidence of sales tax, etc, have affected the industry adversely.

The production is, therefore, limited to a few items. *Saree* is the most important apparel on which *zardozi* work is attempted. Other important items are scarves, blouse pieces, stoles, etc. The processes involved in *zardozi* work are neither many nor elaborate. The workers usually make a drawing of the design on a piece of paper which is subsequently traced on cloth. The piece of cloth on which *jari* is to be embroidered is spread on a wooden frame so that the cloth remains stretched and enables the artist to work on it. The design thereafter embroidered with *jari* thread, stars, spangles, beds, etc. *Jari* embroidery does not require any elaborate tools. They consist of a wooden frame, pair of scissors and needles. The important raw materials used in the craft are gold and silver thread, badla (*tikki*), lace (*zik*), etc. All the raw materials except gold and silver thread and *tikkis* are available in the local market. Gold and silver threads are imported from foreign countries. The prevailing prices of raw materials for the year 1965-66 were as follows.

		Grams	Rs.
1	*Badla* pure	10	4·00
2	*Tikki* pure (*hajaria*) .. .	10	4·70
3	*Zik* pure	10	4·50
4	*Kasab* silver	10	0·50
5	*Kasab* golden	10	0·75

It is estimated that on an average this industry consumed Rs. 25,000 worth of raw materials per year excluding cloth for which no estimate is available.

The industry is controlled by traders. Generally speaking, the artisans do not purchase the raw materials. It is trader who usually supplies cloth, *jari* and also the design to be worked on the cloth. Financial condition of the workers engaged in the craft is so poor that it is difficult for them to provide the funds required. The trade performs entrepreneurial functions of organising the work and risk-taking and ultimately appropriates the producer's surplus. The role of the worker is to execute the orders placed by traders in return for pre-determined wages. His role is that of an out-worker having no hold on the industry. In most of the cases the proprietor's

home serves as the place of work. Generally speaking, wages are paid on piece rate basis. The trader while contracting out work to the craftsmen fixes in advance the wages per piece, taking into account the design and workmanship involved. Wage rate varies for males and females. On piece work basis a male worker gets Rs. 5 per day and a female workers Rs. 3 per day. Marketing poses no problem, as the responsibility of the disposing of the produce is that of the traders who get the work done on payment of wages. The produce is marketed locally and also sent to countries in Africa, England and U. S. A. where Indian citizens stay.

A co-operative society known as Jamnagar Jari Bharat Co-operative Society Ltd. was founded in the year 1956 and registered under the Co-operative Societies Act. It had a membership of 23. The membership was restricted to local residents only. The main objectives of the society were to procure and distribute work to its members, obtain and supply raw materials, advance loans and market the goods produced by its members. The society has now become defunct due mainly to its weak financial position.

Crochet Work[1]—Crochet work literally means looping done with a small hook. Caps, table-cloth and handbags are crocheted with hooked knitting needles, specially made for the purpose. The Vohra cap is the most important product of crochet work of Jamnagar. The antiquity of the craft is lost in the mist of time. According to survey made by the All-India Handicrafts Board " the work of crochet belongs to Vohra community who are Shiah Muslims. In times of Aurangzeb under politicoreligious pressure a section of them migrated from Cambay to Saurashtra. Their economic condition was unsound as such they tried to employ their women in gainful handicrafts of crochet work..............................an association of 300 women of Vohra community are making excellent caps which with little alteration can turn into lady's purse, tea cosy, etc. Apart from Vohra caps of excellent colour and designs of *jari* thread and silk thread they are giving their community laces, scarfs, table-cloths, etc., in work of this description. " The community engaged in the craft is Daudi Vohra. There are 635 households of this community in Jamnagar. Though adult females of about 500 families know the art of crochet work, it is resorted to regularly during leisure hours as a means to supplement the income of the family only by 40 to 50 households. The Report on the Marketing Clinic of Saurashtra Handicrafts by the All-India Handicrafts Board estimated in 1958 that there were approximately 500 to 750 women working part time in the craft. At present, this number has gone down to 100.

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1. TRIVEDI, R. K., Census of India 1961, Vol. V, Gujarat, Part VII-1, *Selected Crafts of Gujarat*, 1967

The basic raw material is cotton or silk thread mostly white and black, whereas jute and *jari* (silver and gold) threads are used as subsidiary raw materials in crochet work for creating beautiful geometrical and floral designs in white or black background. The threads manufactured at Bombay and Ahmedabad are used by the workers. The total value of raw materials used in a year at Jamnagar is approximately Rs. 3,400 to 3,800. The tools and implements used in the crafts are hooked needle, mould and scissors. The tools though simple require concentration and skilful manipulation of fingers.

The technique employed in making a cap consists of simple crocheting or knitting by hand with a special needle with crooked point locally known as *soya* or *kanta*. Conical moulds of tin sheets or wood are used to give proper shape and size to the cap. The upper circular part is knitted first, whereafter the artisan goes on knitting the round walls of the cap with the help of a mould. *Jari* thread, jute thread or coloured thread is used to suit the particular motif to be knitted which is produced by the extra-weft method used in weaving.

It is estimated that 1,000 to 1,200 caps worth Rs. 8,000 to 10,000 are manufactured at Jamnagar every year. The caps of Saifi Grih Udyog run by Anjumane Kutbi are greatly appreciated by experts of the All-India Handicrafts Board and others on account of their splendid workmanship. This institution provides knitting, crocheting and embroidery work to about 100 females of the community on piece-work basis. Besides the local market, caps are sold in large towns and cities of Gujarat with concentration of Vohras who are their only consumers.

Nutcrackers, Penknives, and Scissors—Nutcrackers, penknives and scissors of Jamnagar are famous all over India. The craft is known for a long time in Jamnagar but has gained prominence since last 60 to 70 years. The demand for nutcrackers known as Gulab Sudi, Jagjivan Sudi, Mahavir Sudi, etc., is constantly on the increase on account of their superior workmanship and quality. The tools and equipments comprise electric motor, grinding machine, buff machine and cutting and drilling machines. The machines are operated by electric power. The cost of these equipments varies on an average from Rs. 10,000 to 20,000. The annual value of raw materials used varies from Rs. 25,000 to 76,000. The main raw materials used are brass and steel strips, German silver, nickle, sulphur, copper sulphate, etc. Raw materials are obtained from the open market and also through the Government by quota system. The craft is not a monopoly of any particular caste. The requisite skill and knowledge are transmitted from generation to generation. Establishments are generally housed in separate premises, independent of the place of residence. About 40 to 50 families are at present engaged in this craft. Wages are given

according to piece rate system. The production of nutcrackers, penknives and scissors has an assured market in Gujarat, Uttar Pradesh, Madras, Bombay and Calcutta, etc. The total annual production has been estimated to be of the order of 15,000 dozens nutcrackers valued at about Rs. 360,000.

Agarbatti[1]—*Agarbatti* or making of incense sticks is one of the important crafts recently developed at Jamnagar city. Centres where this industry is operated generally undertake imparting different incenses to the sticks and Jamnagar is one of them. The raw materials used in the craft are sticks, aromatic chemicals, essential oils and perfumes, gelatin, cardboard, butter paper, etc. Sticks are generally purchased quite easily from Bangalore. But the purchase of aromatic chemicals, essential oils and perfumes which were till recently imported mostly from foreign countries presented some difficulty. On account of the imposition of restrictions on their import, the supply position of these articles has become acute. The indigenous production of some of the items, however, is inferior in quality and is also inadequate to meet the demand of the industry.

At present two units are engaged in the manufacture of *agarbatti* in Jamnagar city, and are housed in separate premises. The craft is manually operated in the first instance different chemicals are mixed in certain proportion so as to obtain a definite incense. The proportion, however, varies with every manufacturer and each variety of *agarbatti*. The process of mixing chemicals is kept as a closely guarded trade secret. The next process consists of dipping the sticks into the incense. The sticks then are allowed to dry. Thereafter they are weighed and packed into fancy packets for sale. The sale of *agarbatti* is undertaken by the establishments themselves. They sell nearly 99 per cent of their goods to the wholesale dealers and only 1 per cent to co-operative agencies. Total annual sale of *agarbattis* is estimated at Rs. 2 lakhs. *Agarbattis* are marketed in major cities of Saurashtra and Gujarat and also exported to certain African countries.

Other Crafts—Other crafts which deserve mention are lacquerware, ivory, stone carving, musical instruments, *atlas* weaving, and preparations of cosmetics like *attar*, *kanku*, *kajal* and *surma*. These crafts are practised on a small scale in Jamnagar city. Lacquerwares can broadly be divided into two categories, viz., (i) utility articles, and (ii) toys. Utility articles include (1) cradle legs, (2) cot legs, (3) *velan* (a roller for making bread), (4) *chakla* (wooden tripods) (5) *rawai* (a churning staff) and (6) *patla* (wooden seat). Toys account for only a small proportion of the total production. So far as ivory craft is concerned bangles are the only article manufactured at

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1. All India Handicrafts Board (Planning and Research Section), *Handicrafts of Jamnagar*, 1968

Jamnagar and Jam Khambhalia. No other decorative articles are produced. The production in stone carving is mainly confined to idols. Other articles include transcription of verses on marble and stone and carving of animal figures. In the case of musical instruments the main instrument produced are *sitar* and *dilruba*. Silk weaving (*atlas*) is also an old handicraft of Jamnagar city flourishing since last 350 years. *Atlas* is a special type of silk cloth manufactured from raw silk thread and is mainly used by people in rural areas. The craftsmen of Jamnagar are also well-known for *pallao* and *saree* ends.

INDUSTRIAL POTENTIAL AND PLAN FOR FUTURE DEVELOPMENT

The potentiality of the industrial development in the district is essentially correlated to the availability of primary resources such as agricultural, mineral, marine, forest produce, etc., and basic raw materials required for manufacturing finished products. The principal industries which have been developed so far in the district are groundnut oil, textiles, ceramics, cement, chemicals, salt, wool, brass parts, buttons, paints, etc. Possibilities of further progress exist in the following branches of industries.

(*i*) *Oil, Oil-seeds Crushing Industry*—Besides being one of the chief items of food, groundnut oil is a basic material for the manufacture of several commodities such as soaps, cosmetics, paints and varnishes and other allied products. Oil-seeds are extensively grown in Jamnagar district. Groundnut yielded 1·96 lakh tons in the year 1964-65 and accounted for 48·12 per cent of the total outturn of principal crops. In view of this oil milling industry has become a flourishing economic activity in the district.

Oil milling, solvent extraction, refining of oils, utilising bye-product of soap stock for manufacture of soap and fat splitting are the chain processes. Solvent extraction of oilcakes to recover residual oil and obtain practically de-oiled cake is an important feature of all the processes. There is ample scope for the extension of this industry. An additional plant with 51 tonnes capacity for processing of meal (oilcake or seed) can be installed in Jamnagar city with a capital outlay of about 15 lakhs of rupees providing employment to about 60 persons. If this plant is combinal with a refinery of matching capacity, a capital of about Rs. 25 lakhs giving employment to 90 to 100 pesons would be required.[1]

(*ii*) *Refined Alumina*—Jamnagar district has rich bauxite deposits. This occurs in the form of laterite. It contains on an average 65 per cent

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1 Government of Bombay, *Master Plan for Industrialisation of Bombay State*, 1960, p 167

Al_2O_3 with traces of iron. It occurs in Nandana, Ran, and Virpur areas of the district in a continuous belt 12 miles long and 1 to 4 miles broad. Considering the proximity of bauxite deposites and availability of other facilities, Jamnagar city would be an ideal site for installing plant with a capacity of 15,240 tonnes per annum with a capital investment of about Rs. 3 crores which would provide employment to about 800 persons.

(iii) *Woollen Carpets*—The district contributes 25 per cent of wool export of the country. This wool is carpet wool, but no carpet manufacturing unit has so far been established in the district. There is a number of wool *kandories* (wool sorting *karkhanas*) at Jamnagar which will be a good centre for starting this industry. It will also boost the export trade. A good-sized power-loom plant would require a capital outlay of one crore rupees.

(iv) *Bye-products of Salt and Bitterns*—The long coastline of the district has offered good scope for the development of salt industry which had at 6 salt works in the district in 1965. After the recovery of salt, the bitterns left over contain chemicals like potassium chloride, magnesium chloride, etc., in addition to some quantity of salt. Bitterns are thus a valuable source of these chemicals, particularly for potassium chloride which finds use as a fertiliser and in the manufacture of potassium salts. Only a small fraction of bitterns made available by the salt industry is at present utilised for the production of important marine chemicals. Efforts can, therefore, be made to utilise large quantity of bitterns to manufacture marine chemicals such as light magnesium, potasium chloride, bromine, etc. Taking into consideration the capacities of the existing salt works and other facilities available, Jamnagar city is a suitable place for establishing a plant for the manufacture of marine chemicals. A plant producing 25 tons of potassium chloride per day would require a capital investment of about Rs. 30 lakhs and provide employment to 50 persons.

Industrial Licensing—The development of large scale industries is regulated by the Government of India which issued licenses for the purpose under the Industries Development and Regulations Act, 1951 on the recommendation of the State Government. Increased industrial activity in the district in recent times can be noticed from the fact that as many as 47 applications were made for the issue of licenses either for starting new or expanding existing large scale industries till 31st March, 1966. Of these 17 were for the former and 30 for the latter purpose. The Government of India issued licences for the establishment of five new industries and expansion of 14 existing industries towards which two new industries have been established and 6 existing industries have expanded, as shown in the statement given below.

Sl. No.	Item	Applications received		Licences issued		Letter of intent issued	
		New units	Substantial expansion	New units	Substantial expansion	New units	Substantial expansion
1	2	3	4	5	6	7	8
1	Engineering	5	1	4	..	1	..
2	Chemicals	4	18	..	10	..	4
3	Glass and chemicals ..	1	..	..	..	..	..
4	Textiles	4	2	..	1	..	..
5	Oil (vanaspati, etc.) ..	..	4	..	2	1	2
6	Cement	2	5	..	1	..	..
7	Miscellaneous ..	1	..	..	..	..	..

Source :

Government of Gujarat, *Pragatine Panthe, Jamnagar Jillo*, p. 35, 1967

Development of Small Industries—A complete picture of the industrial potential of the district would remain incomplete without referring to the possibilities of development in the small scale sector which occupies an important place in the industrial set up of the district from the point of income earned and employment offered. Besides Jamnagar city small scale industries could also be set up with advantage in other towns like Khambhalia, Kalavad, Jamjodhpur, and Jodiya by providing cheap electric power, better transport facilities, establishment of industrial estates, supply of machinery and equipment on hire purchase basis, adequate financial aid, and wider markets for their products.

LABOUR AND EMPLOYERS' ORGANISATIONS

(1) *Labour Organisations*—The Trade Union Movement signifies a collective effort on the part of labourers to increase their bargaining power in the labour market and thereby improve their social and economic condition. Before the integration of States there was generally speaking no such freedom of association in most of the States of Saurashtra. In the former States of Nawanagar and Dhrol, the trade union activity was completely absent. In Dwarka and Mithapur which formed part of the former Baroda State, "Dwarka Cement Works Employees' Union" and "Chemicals Kamdar Sangh" were the only unions in existence in pre-Independence days. The former had a membership of 300 persons in 1946 and the latter of 1,000 persons in 1948. Soon after the integration of the States of Kathiawar, it was made clear in the first policy announcement made by the Government of Saurashtra that it was wedded to a progressive labour policy, similar to the one followed by other States in India. Uniform legislation was enacted by adapting labour laws in force in the State of Bombay. The trade union activity also got impetus after the formation of Saurashtra State. The Trade Union Ordinance which embodied the provisions of the Indian Trade Union Act, 1926 was promulgated in the middle of 1949. Trade unions functioning in the district at present are governed by this Act.

The statement given below shows the progress of labour unions in the district.

Year	Number of unions	Number of members
1950-51	8	1,313
1960-61	34	5,373
1963-64	33	6,225

Source :

1. VAKIL and LAKDAWALA, *Economic Survey of Saurashtra*, Bombay, p. 257, 1953
2. Government of Gujarat, *Annual Report on the Activities of Government Pertaining to labour matters*, Ahmedabad, p. 30, 1964
3. Government of Gujarat, *Annual Administration Report under the Indian Trade Unions Act*, 1926 for the year 1963-64, Ahmedabad, p. 4, 1966

The number and membership increased considerably between 1950-51 and 1960-61. Though the number of trade unions registered a slight decrease from 34 in 1960-61 to 33 in 1963-64 the membership has gone up from 5,373 to 6,225.

(2) *Employers' Organisations*—A brief description of some of the important associations of whom several large and small concerns are members is given below.

(*i*) *Saurashtra Oil Mills Association, Jamnagar*—The Association was started for the oil mills industries of Saurashtra in 1948 with a view (1) to undertake all necessary activities for the promotion and development of industries related to oils, oil-seeds, oilcakes and meal and (2) to collect, preserve and circulate statistics and other information pertaining to the industry. In 1966, it had a total membership of 277 out of whom 63 were from Jamnagar district.

(ii) *The Kutch Saurashtra Salt Manufacturers' Association, Jamnagar*—This Association was established in 1952 to promote the development of salt industry and secure organized action on all subjects relating to salt industry. In 1965 out of 8 members, the Association had 7 were from Jamnagar district.

(*iii*) *The Jamnagar Factory Owners' Association, Jamnagar*—This Association was established in 1948 by the factory owners of Jamnagar. The Association was formed primarily for the purpose of securing co-ordinated action in respect of the problems affecting factories. Its aims and objects include proper supply and distribution of raw materials, effective representation on behalf of its members to Government for redressing their grievances and doing all that is needful for promoting development of industries. Ever since its inception, the Association has represented to Government the grievances of manufacturers of brass and its spare parts, buttons, small engineering goods and other industries. In 1965 it had a total membership of 380.

(*iv*) *Other Organisations*—Apart from the Associations mentioned above there are some registered at Bombay of which some of the large scale units of the district are members. The Digvijay Woollen Mills Ltd. is a member of the Indian Woollen Mills' Federation, Bombay; The Digvijay Cement Company Ltd. of the Cement Manufacturers' Association, Bombay; and the salt works in the district of the Indian Salt Manufacturers' Association, Bombay.

WELFARE OF INDUSTRIAL LABOUR

Prior to integration, there was complete absence of labour welfare measures in the district. There was regulation neither of hours of work nor of rates of wages. The statutory compensation was also not prescribed. The Government of Saurashtra, however, took various steps to promote welfare of industrial labour by enacting uniform labour laws and establishing welfare centres. The Saurashtra Factories Ordinance was promulgated in 1949[1] and adequate administrative machinery for implementing labour legislation was brought into being with the appointment of Labour Commissioner, two Assistant Labour Commissioners who also worked as conciliation officers, two labour officers and an Industrial Tribunal. Apart from Government, many large scale factories also regard welfare work as prudent investment. Some of the important industrial establishments like Dwarka Cement Works, Tata Chemicals Ltd., Digvijay Cement Works, Digvijay Woollen Mills Ltd., have not been slow in appreciating the necessity of providing welfare amenities in the form of medical facilities, gymnasia, clubs with facilities for indoor and outdoor games, canteens, creches, co-operative stores, etc. The section that follows outlines the measures undertaken for the welfare of industrial labour.

The Indian Factories Act, 1948—This basic piece of legislation was promulgated under the Saurashtra Factories Ordinance in June 1948. The Indian Factories Act. 1948 was made applicable to the State of Saurashtra from 1st April, 1949. It covers all industrial establishments employing 10 or more workers where power is used and 20 or more workers in other cases The provisions of this Act are very briefly described below.

The Act lays down the minimum requirements regarding the health, safety and general welfare of workers. It contains a number of obligatory provisions relating to the disposal of waste and effluence, ventilation and

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1 The other Acts such as Workmen's Compensation Ordinance, 1923. The Indian Trade Unions Act, 1926; The Minimum Wages Act, 1948, The Maternity Benefit Act, 1929, The Employees' Provident Fund Act, 1952, which promoted the welfare of industrial labour have been described in Chapter XVII—Other Social Services.

temperature, provision of cool water during hot weather, etc. To avoid over-crowding, the Act provides for a minimum space of 500 cubic feet for each worker in a factory built after the commencement of the Act and 350 cubic feet for each worker in the existing factories. It embodies a number of safety provisions relating to the use of new machinery, hoists and lifts, cranes and other lifting machinery and prescribes the precautions to be taken against dangerous fumes and explosives and inflammable dust or gas.

The working hours of the adult workers have been fixed at 48 a week and 9 a day. The maximum time spread and timing and duration of rests have also been laid down. Women and adolescents are not allowed to do night work.

The Act makes provisions for specific welfare measures such as washing facilities, first aid appliances, canteen, rest shelters, etc.

The Inspector of Factories, Rajkot, is responsible for the administration of Factories Act in Jamnagar district in addition to that of the Acts mentioned below : (1) The Payment of Wages Act, 1936 so far as it relates to Factories Act, 1949, (2) The Employment of Children Act (XXVI of 1938) and (3) Cotton Ginning and Pressing Factories Act, 1925 (Section 9).

Subsidised Industrial Housing—With the growing consciousness of development and better living, the problem of adequate and sanitary housing to industrial labour has come to the forefront. The Government has formulated various schemes for execution through the State Housing Board. The subsidised industrial housing scheme is one of them. Under this scheme an industrial worker covered by the Factory Act, 1948 whose monthly income does not exceed Rs. 500 is eligible for a tenement at a subsidised rent. The ceiling for the construction of such a tenement ranges from Rs. 3,300 to 3,700 towards which the Central Government grants 50 per cent by way of loan and 50 per cent as subsidy to the State Government. The following table gives figures of tenements constructed during the First, Second and Third Five Year Plans in Jamnagar district.

	First Five Year Plan		Second Five Year Plan		Third Five Year Plan	
Location	No. of tenements	Total cost (in Rs.)	No. of tenements	Total cost (in Rs.)	No. of tenements	Total cost (in Rs.)
1	2	3	4	5	6	7
Jamnagar ..	..	..	500	1,316,400	256	985,000
Sikka ..	..	..	60	167,000	..	..

Source :

The Housing Commissioner, Gujarat Housing Board, Ahmedabad

The district had 816 tenements constructed during the Second and Third Five Year Plans at a total cost of Rs. 2,471,400.

Apart from the Gujarat Housing Board, housing facilities have also been provided by Associated Cement Factory, Shree Digvijay Cement Factory and Halar Salt and Chemical Works for their employees. The Associated Cement Factory has constructed 300 tenements while Shree Digvijay Cement Factory has provided 964 tenements in all. About 300 quarters have also been provided by the Halar Salt and Chemical Works.

WAGES

The problem of wage determination cannot be considered in isolation from the larger and economic and social background obtaining in the district. A well conceived wage policy aims at (a) continual improvement in worker's living standard and (b) reasonable returns for the employers. The subjoined statement gives a comparative idea of the minimum wages fixed for workers in rice, flour and dal and oil mills.

STATEMENT V.9

Minimum Wages in Rice, Flour, Dal and Oil Mills for the Years, 1952 and 1965

Zones		Rice mill, flour mill or dal mill		Oil mills					
				Skilled		Semi-skilled		Unskilled	
		1952 (per month)	1965	1952 (per month)	1965 (per day)[1]	1952 (per month)	1965 (per day)	1952 (per month)	1965 (per day)
		Rs. p.		Rs. p.	Rs. p.	Rs. p.	Rs. p.	Rs. p.	Rs. p.
1		2	3	4	5	6	7	8	9
I	Jamnagar	52.50	..	63.50	3.20 (Zone II)[1]	55.50	2.90 (Zone II)	52.50	2.60 (Zone II)[1]
II	Places having a population of 15,000 and over but excluding places mentioned in Zone No. I ..	45.50	..	55.50	..	48.50	..	45.50	..
III	Places having a population of 5,000 and over but below 15,000 ..	39.00	..	47.50	..	41.50	..	39.00	..
IV	All the remaining areas not mentioned in any of the above 3 Zones ..	32.50	..	..	3.00 (Zone IV)[1]	..	2.70 (Zone IV)[1]	..	2.40 (Zone IV)[1]

1. According to the Notification No. KH-SR-445/(1) MWA-1664/32848/T, dated 20th May, 1965 of Education and Labour Department, Government of Gujarat, Jamnagar city was included in Zone II and other areas of the district formed part of Zone IV.

Textile Mills—There are two textile mills in the district viz., Harshad Textile Mills and Digvijay Woollen Mills. The Harshad Textile Mills pays Rs. 75·21 per month as minimum wage to skilled workers and Rs. 29·90 to unskilled workers. It pays dearness allowance to skilled/unskilled workers at the rate of Rs. 104·70 per month. The Digvijay Woollen Mills pays Rs. 28·08 per month as minimum wage to unskilled workers for 26 days. As the labour force of the mill is not classified into skilled and semi-skilled. separate wage rates for these categories are not prescribed. The dearness allowance payable to its workers is 80 per cent of the dearness allowance payable to workmen of Ahmedabad Cotton Textile Industry calculated on the cost of living index number every month.

Other Industries—The standard of wages in other industries such as Digvijay Cement Factory and Indian Extractions Private Ltd. is fairly high. In the Digvijay Cement Factory, the basic or minimum wage fixed for a skilled worker varies from Rs. 110.50 to 169·00. In Indian Extractions Private Ltd. the minimum wage was Rs. 100 for a skilled worker and Rs. 78 for the unskilled.

Medical Benefits—Almost all the factories in the district have provided first aid boxes, besides the following which had their own dispensaries for providing medical facilities to their labourers.

1 Halar Salt and Chemical Works
2 The Associated Cement Factory
3 Shree Digvijay Cement Factory
4 Shree Digvijay Woollen Mills
5 Harshad Textile Mills
6 Burmah-Shell
7 Brooke Bond India Private Ltd.

Recreation Facilities—Recreational facilities have been made available by several factories, important among them being the Digvijay Woollen Mills. Associated Cement Factory, Brooke Bond India Private Ltd. and Halar Salt and Chemical Works. A large building with a number of rooms and concrete courtyards has been constructed by the Associated Cement Companies Ltd. wherein indoor games like carom, badminton, table tennis, billiard, etc., a library with a variety of books in Hindi, Gujarati and English and a number of weeklies and periodicals are provided. For outdoor games, a fairly large playground is maintained in good condition. A swimming pool has also been added adjacent to the club building.

The Digvijay Woollen Mills arranges periodical film shows for its employees. Its staff members have their own club which organises and encourages indoor and outdoor games and sports competitions, has a reading room and library and provides facilities for cultural activities. The Digvijay Cement Factory has a club which has made provision for indoor games such as badminton. table tennis, chess, cards, carom, ring. tennis, etc. The

factory had a library with 2,000 books and a reading room wherein four daily papers and about one dozen monthly magazines are subscribed. Two free cinema shows are also arranged every month.

Other Facilities—The canteen and refreshment rooms have been provided by almost all large factories. Important factories such as Salt and Allied Industries, Jamnagar, Digvijaysinhji Salt Works, Shree Digvijay Cement Company, Tata Chemicals Ltd. have also provided creche buildings.

Labour Welfare Centres—Two labour welfare centres, one of 'C' type and the other of 'D' type are functioning in Jamnagar. The 'C' type welfare centre is situated at Bedeshwar and was opened in 1949. It is housed in a building constructed by the Government in 1954-55 and carries on such activities as (1) adult education, (2) Balmandir, (3) women welfare activities, (4) sewing classes for women, (5) indoor and outdoor games, (6) cinema shows, (7) library and reading room, (8) miscellaneous cultural activities, and (9) radio and musical instruments.

The 'D' type labour welfare centre is accommodated in hired premises at Shanker Tekary. Amenities provided include a library and reading room, indoor and outdoor games and radio and musical instruments.

STATEMENTS

(Bk) H-17--32 (Lino)

STATEMENT V.2

Industries Arranged According to the Number of Establishments

Sl No.	Description	Number of units	Percentage to total No. of units
1	2	3	4
1	Manufacture of other wood and allied products ..	727	18.76
2	Making of textile garments including raincoats and headgear	625	16.14
3	Production of rice, *atta*, flour, etc , by milling, dehusking and processing of crops and food grains ..	432	11.16
4	Manufacture of jewellery silverware and wares using gold and other precious metals	399	10.29
5	Manufacture of sundry hardwares such as G. I. pipe, wire net, bolt, screw, bucket, cutlery, (this will also include the manufacture of sundry ferrous engineering products done by jobbing engineering concerns which cannot be classified in major groups 36,37,38 and 39)	312	8.18
6	Manufacture of shoes and other leather footwear ..	287	5.03
7	Production of other food products such as sweetmeat and condiments, muri, murki, chira, khoi, cocoa, chocolate, coffee, lozenge	139	3.60
8	Production of edible fats and oils (other than hydrogenated oil)	96	2.50
9	Manufacture of brass and bell metal products ..	84	2.20
10	Repairing of bicycles and tricycles	80	2.18
11	Manufacture of turpentine, synthetic, resin and plastic products and materials (including synthetic rubber) ..	73	1.95
12	Manufacture of earthenware and earthen pottery	72	1.89
13	Manufacture of *bidi*	63	1.65
14	Manufacture of wooden furniture and fixtures ..	42	1.19
15	Manufacture and assembling of machinery (other than electrical) except textile machinery	33	0.89
16	Cotton weaving in handlooms	28	0.78
17	All other types of printing including lithography, engraving, etching, block making and other work connected with printing industry	27	0.75
18	Wool weaving in handloom	25	0.70
19	Production of bread, biscuits, cake and other bakery products	24	0.65
20	Assembling and repairing of watches and clocks ..	23	0.63
21	Printing of cotton textile	22	0.61
22	Production of aerated and mineral water	20	0.58
23	Enamelling, galvanising, plating (including electroplating) polishing and welding of metal products ..	19	0.56
24	Repairing and servicing of motor vehicles . ..	16	0.51
25	Sawing and planning of wood	15	0.48
26	Manufacture of metal products (other than of iron, brass, bell metal and alluminium) such as tin can ..	12	0.40
27	Production of ice	11	0.35
28	Manufacture including smelting, refining of non-ferrous metals and alloys in basic forms	11	0.35
	Total (1 to 28)	*3,717*	*95.87*
	Others	160	4.13
	Grand Total	**3,877**	**100.00**

Source :

Census of India 1961, Vol. V, Gujarat, Part IV-B, *Housing and Establishment Tables*, (E–Series Tables)

STATEMENT V.3

Industrial Classification of Persons at Works Other than Cultivation

Sl. No.	Description of industry	Total workers	Workers in household industry	Workers in non-household industry
1	2	3	4	5
	Total	**122,977**	**23,205**	**99,772**
1	Agriculture, livestock, forestry, fishing and hunting	15,196	10,227	4,969
2	Field produce and plantation crops ..	1,585	53	1,532
3	Plantation crops	48	..	48
4	Forestry and logging	254	14	240
5	Fishing	1,164	215	949
6	Livestock and hunting	12,145	9,945	2,200
7	Mining and quarrying	2,086	6	2,080
8	Manufacturing	36,361	12,972	23,389
9	Food-stuffs	2,724	545	2,179
10	Beverages	136	2	134
11	Tobacco products	1,430	790	649
12	Textile-cotton	2,872	2,037	835
13	Textile-jute	8	4	4
14	Textile-wool	1,230	152	1,078
15	Textile-silk	39	25	14
16	Textile-miscellaneous	3,389	1,536	1,853
17	Manufacture of wood and wooden products	3,549	2,225	1,324
18	Paper and paper products	16	4	12
19	Printing and publishing	175	1	174
20	Leather and leather products ..	2,445	1,783	662
21	Rubber, petroleum and coal products ..	23	1	22
22	Chemicals and chemical products ..	6 840	44	6,796
23	Non-metallic mineral products other than petroleum and coal . ..	6,749	2,634	4,115
24	Basic metals and their products except machinery and transport equipment ..	2,058	497	1,561

Source :

Census of India 1961, Vol. V, Gujarat, Part II-B(1), *General Economic Tables*

STATEMENT V·3—*contd.*

Sl. No. 1	Description of industry 2	Total workers 3	Workers in household industry 4	Workers in non-household industry 5
25	Machinery (all kinds other than transport) and electrical equipment	210	7	203
26	Transport equipment	366	15	351
27	Miscellaneous manufacturing industries	2,093	670	1,423
28	Construction	3,766	..	3,766
29	Electricity, gas, water and sanitary services	723	701	22
30	Electricity and gas	669	..	669
31	Water supply and sanitary services	54	..	54
32	Trade and commerce	17,437	..	17,437
33	Wholesale trade	1,512	..	1,512
34	Retail trade	14,849	..	14,849
35	Trade and commerce miscellaneous ..	1,076	..	1,076
36	Transport, storage and communication ..	9,468	..	9,468
37	Transport	8,999	..	8,999
38	Storage and warehousing	1	..	1
39	Communication	468	..	468
40	Services	31,002	..	31,002
41	Public services	9,455	..	9,455
42	Education and scientific services .	3,273	..	3,273
43	Medical and health services ..	1,320	..	1,320
44	Religious and welfare services .	1,423	..	1,423
45	Legal services	122	..	122
46	Business services . ..	626	..	626
47	Community services and trade and labour associations	668	..	668
48	Recreation services	216	..	216
49	Personal services	5,665	..	5,665
50	Services (not elsewhere classified) ..	8,234	..	8,234
51	Activities not adequately described ..	6,938	..	6,938
52	Activities unspecified and not adequately described (this includes new entrants to the labour market)	6,936	..	6,936

STATEMENT V.5

Number of Factories and Workers for all Industries in 1956, 1960 and 1966 in Jamnagar District

Sl. No.	Name of the industry	1956						1960	
		Large scale		Small scale		All factories		Large scale	
		Factories	Workers	Factories	Workers	Factories	Workers	Factories	Workers
1	2	3	4	5	6	7	8	9	10
1	Gins and presses	1	139	8	331	9	470	1	103
2	Manufacture of miscellaneous food preparations	9	1.949	21	609	30	2,558	11	2,404
3	Spinning, weaving and finishing of textiles ..	3	2,451	..	..	3	2,451	2	1,039
4	Manufacture of wood and cork except manufacture of furniture	1	70	..	..	1	70	..	..
5	Manufacture of furniture and fixtures ..	..	..	..	..	..	..	..	..
6	Pulp, paper and paper board mills	..	..	..	..	..	..	..	..
7	Printing, book-binding, etc.	..	..	1	18	1	18	..	..
8	Basic chemicals including fertilizers	1	1,591	..	..	1	1,591	1	1,886
9	Manufacture of miscellaneous chemical products	..	..	2	22	2	22	..	..
10	Petroleum refineries	1	266	..	..	1	266	1	313
11	Manufacture of structural clay products ..	1	62	3	110	4	172	..	..
12	Manufacture of pottery, china and earthenware ..	..	..	..	..	..	..	1	491

13	Manufacture of cement	2	1,958	..	..	2	1,958	2	1,294
14	Manufacture of metal products (except machinery and transport equipment)	1	75	5	71	6	146	..	..
15	Manufacture of machinery (except electrical machinery)	..	..	7	99	7	99	2	136
16	Electrical machinery apparatus, appliance and supplies	..	..	1	4	1	4	..	..
17	Ship building	2	130	..	..	2	130	1	125
18	Manufacture and repair of railroad equipments	2	554	..	..	2	554	1	266
19	Manufacturing industries not elsewhere classified	2	120	21	405	23	525	..	..
20	Electric light and power	2	129	1	12	3	141	2	157
	Total	**28**	**9,494**	**70**	**1,681**	**98**	**11,175**	**25**	**6,214**

Source :

1. *Location of Industries in Gujarat State*, 1956-60, published by Bureau of Economics and Statistics, Ahmedabad
2. The Chief Inspector of Factories, Gujarat State, Ahmedabad

STATEMENT V·5—*contd.*

Sl. No.	Name of the industry	1960 Small scale Factories	1960 Small scale Workers	1960 All factories Factories	1960 All factories Workers	1966 Large scale Factories	1966 Large scale Workers	1966 Small scale Factories	1966 Small scale Workers	1966 All factories Factories	1966 All factories Workers
1	2	11	12	13	14	15	16	17	18	19	20
1	Gins and presses	10	267	11	370	1	115	7	169	8	284
2	Manufacture of miscellaneous food preparations..	49	1,051	60	3,455	13	2,312	45	924	58	3,236
3	Spinning, weaving and finishing of textiles ..	..	..	2	1,039	2	1,140	..	..	2	1,140
4	Manufacture of wood and cork except manufacture of furniture	2	37	2	37	..	..	1	5	1	5
5	Manufacture of furniture and fixtures ..	1	12	1	12	..	..	1	14	1	14
6	Pulp, paper and paper board mills	1	25	1	25	..	..	1	20	1	20
7	Printing, book-binding, etc.	1	9	1	9	..	..	..	..	..	..
8	Basic chemicals including fertilizers	..	..	1	1,886	5	2,478	2	43	7	2,521
9	Manufacture of miscellaneous chemical products	1	40	1	40	..	..	2	66	2	66
10	Petroleum refineries	..	..	1	313	1	151	4	78	5	225
11	Manufacture of structural clay products ..	4	84	4	84	1	157	4	115	5	272
12	Manufacture of pottery, china and earthenware ..	..	..	1	491	..	..	..	..	..	..

13	Manufacture of cement . . .		.	2	1,294	2	1,199	.	..	2	1,199
14	Manufacture of metal products (except machinery and transport equipment) ..	8	151	8	151	.	..	17	231	17	231
15	Manufacture of machinery (except electrical machinery)	13	252	15	388	4	703	24	370	28	1,073
16	Electrical machinery apparatus, appliance and supplies	3	77	3	77	..	..	10	100	10	100
17	Ship building	1	12	2	137	1	100	1	10	2	110
18	Manufacture and repair of railroad equipments ..	..	..	1	266	1	284	2	63	3	347
19	Manufacturing industries not elsewhere classified	19	362	19	362	1	80	29	585	30	665
20	Electric light and power	4	57	6	214	1	233	5	60	6	293
	Total	117	2,436	142	10,650	33	8,952	155	2,849	188	11,801

(Bk) H-17—33 (Lino)

STATEMENT V.7

Number of Establishments and Number of Persons Employed in Cottage Industries Selected for Survey, 1960-61

Sl. No.	Name of the industry	Total No. of establishments			No. of persons employed in the selected industries: Households			No. of persons employed in the selected industries: Outsiders			Total No. of persons employed in the selected industries		
		Power	Non-power	Total	Power	Non-power	Total	Power	Non-power	Total	Power	Non-power	Total
1	2	3	4	5	6	7	8		10	11	12	13	14
1	Weaving	..	581	581	..	1,357	1,357	..	23	23	..	1,380	1,380
2	Dyeing and printing ..	..	612	612	.	1,088	1,088	..	263	263	..	1,351	1,351
3	Jari thread works ..	.	..	..	..	..	.	..	..	..	..	..	..
4	Blacksmithy	35	103	138	63	167	230	107	57	164	170	224	394
5	Metal works	47	974	1,021	76	1,862	1,938	220	113	333	296	1,975	2,271
6	Carpentry	13	1,695	1,708	28	2,910	2,938	20	72	92	48	2,982	3,030
7	Cane and bamboo products ..	..	38	38	.	93	93	..	..	..	..	93	93
8	Bricks and tiles	..	696	696	..	2,717	2,717	.	101	101	..	2,818	2,818
9	Other potteries	..	1,178	1,178	..	3,868	3,868	..	..	..	..	3,868	3,868
10	Leather working and tanning..	..	894	894	.	1,436	1,436	..	91	91	..	1,527	1,527
11	Oil pressing	2	218	220	3	437	440	5	3	8	8	440	448
12	Gur making	143	248	391	309	1,302	1,611	854	682	1,536	1,163	1,984	3,147
13	Bee keeping	.	.	..	.					..	..	..	..

14 Soap making ..	.	.	16	16	—	23	23	..	54	54	..	77	77
15 Match making .	..	..	..	..	..	..	..	..	..	..	..	..	..
16 Paddy husking ..	..	342	124	466	671	310	981	91	.	91	762	310	1,072
Total	..	582	7,377	7,959	1,150	17,570	18,720	1,297	1,459	2,756	2,447	19,029	21,476

Source :

Quarterly Bulletin of Economics and Statistics, Vol. II, No. 1, January-March, 1962, Bureau of Economics and Statistics, Gujarat State, Ahmedabad

STATEMENT V.8

Number of Establishments and Number of Persons Employed in Small Scale Industries Selected for Survey, 1960-61

Sl. No.	Name of the industry	Total No. of establishments			No. of persons employed in the selected industries						Total No. of persons employed in the selected industries		
					Household			Outsiders					
		Power	Non-power	Total	Power	Non-power	Total	Power	Non-power	Total	Power	Non-power	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Weaving	..	1	1	..	2	2	..	14	14	..	16	16
2	Dyeing and printing	..	12	12	..	33	33	..	125	125	..	158	158
3	Jari thread works	..	..	.	..	..	.	..	..	..	..	..	..
4	Blacksmithy	11	..	11	22	..	22	104	..	104	126	..	126
5	Metal works	43	..	43	99	.	99	401	..	401	500	..	500
6	Carpentry	1	..	1	3	..	3	8	..	8	11	..	11
7	Cane and bamboo products	..	..	..	..	..	..	..	..	..	..	..	..
8	Bricks and tiles	..	2	2	..	16	16	..	7	7	..	23	23
9	Other potteries	..	..	..	..	..	..	..	..	..	..	..	..
10	Leather working and tanning	..	2	2	..	2	2	..	20	20	..	22	22
11	Oil pressing	5	..	5	13	..	13	49	.	49	62	.	62
12	*Gur* making	52	192	244	211	1,327	1,548	668	858	1,526	889	2,185	3,074
13	Bee keeping	..	.	..	..	.	..	..	..	..	..	..	..

14	Soap making ..	..	..	3	3	..	4	6	.	29	29	..	35	35
15	Match making ..	..	..	..	..	..	..	..	..	..	..	..	..	.
16	Paddy husking ..	..	..	..	..	..	..	..	..	..	..	.	..	..
	Total ..	..	112	212	324	358	1,386	1,744	1,230	1,053	2,283	1,588	2,439	4,027

Source :

Quarterly Bulletin of Economics and Statistics, Vol. II, No. 1, January-March, 1962, Bureau of Economics and Statistics, Gujarat State, Ahmedabad

CHAPTER VI

BANKING, TRADE AND COMMERCE

Banking and Finance

Availability of finance is an important factor in the agro-industrial growth of an area, a board idea of which can be had by reviewing the work of agencies providing credit to farmers, traders, industrialists and others in the district. They are indigenous money-lenders, co-operative credit societies, co-operative banks, joint stock banks, and corporations formed by Government in both the sectors. Their function is two fold ; to mobilise the savings of the public and to canalise them into different productive activities. There are also the insurance companies whose main business is to collect the savings of the people in the form of premia and invest them in interest yielding securities or contribute to the capital requirements of industries by investing in shares or debentures of these industries. Private and public limited companies also attract savings of the public in the form of share capital and deposits for utilising them in different productive activities. The State also plays a significant role in the financial sphere by floating loans and promoting small savings for financing developmental plans and other Governmental activities. Life Insurance Corporation and various other corporations both in the public and private sectors such as the Unit Trust and others have been playing an important part in developing the financial structure of the State and the country. The part played by each of these agencies will be reviewed in the pages that follow.

INDIGENOUS BANKING

Strictly speaking very little information is available regarding the activities of this age-gold institution of money-lenders for the period prior to 1874. *The Statistical Account of Nawanagar* (1879), which throws some light on this agency observes :

> " The principal money-lenders in the Nawanagar State are Wanias, Bhatias, Nagars, Brahmans, and Khojas ; among merchants the usual rate of interest is from 4½ to 6 per cent, among cultivators from 9 to 18 per cent, and among Garasias or landowners, from 12 to 24 per cent, unless land be mortgaged collaterally as security. If, too, ornaments are pledged as security, the rate of interest is lowered in proportion to the value of the ornaments. "

Further on it states, " There is no custom of presenting the banker with anything at the time of the repayment of the loan, but rather it is usual for a

deed to be drawn out for a sum in excess of the amount actually paid to the borrower, or for the borrower to give back a few rupees at the time of borrowing, as Kothli choraman, watao, or other local name. On the other hand when a loan is repaid, the lender often excuses a portion of the interest."[1]

This account does not give much information regarding the activities of money-lenders. However, it can easily be surmised that even nearly a hundred years ago the rates of interest charged to persons following different occupations varied considerably according to the nature of occupations followed by them and that land holding classes like cultivators and Garasias were charged exorbitantly. The rate of interest was comparatively higher in the early part of the nineteenth century. In 1820 among merchants the usual rate of interest was 7½ to 9 per cent and among cultivators nearly 24 per cent. One of the main reasons for such a high rate of interest was the relative extent of the risk involved and the unorganised capital market over which the money-lenders had almost absolute control, which tempted them to take undue advantage of the illiterate and ignorant *kheduts*. Besides charging high rate of interest, they adopted a number of fraudulent and usurious practices which ultimately resulted in the heavy indebtedness of the agriculturist. The Koli *kheduts* in the State (Nawanagar) were the worst affected. The Ahir and Garasia *kheduts* were also similarly indebted. It was feared that unless some step was taken, the result will be a thorough and complete economic ruination of the peasantry.

Relief to Indebted Agriculturists—It was with this end in view that the Agriculturists' Relief Act, on the broad lines of the Bombay Agriculturists' Relief Act, was passed in 1916 by the former Nawanagar State. The more important provisions of the Act were

(1) Limitation of interest charged to 12 per cent per annum.

(2) Exemption from forfeiture of agricultural implements, milch cattle, bullocks, cultivable land and foodgrains required for maintenance for a period of one year.

(3) Maintenance of accounts of all transactions duly endorsed by debtor *kheduts* who were to be furnished with a copy thereof.

(4) Payment by instalments fixed by the court in case of inability of the borrower to repay the entire debt at a stretch.

The Act had hardly achieved its aim. This, however, was too inadequate

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1 WATSON, J. W., *Statistical Account of Nawanagar*, p. 15, 1879

a measure to check the galloping indebtedness of *kheduts*. For the passing of such an Act merely reflected the awareness of the State to put an effective check over the tricky and tortuous practices of money-lenders. But to eradicate the evil it was essential to break the monopoly of the money-lenders and this could be done only by making some alternative arrangements to provide financial accommodation at reasonable rates to the needy cultivators. Some efforts were made by the former Nawanagar State Administration in this direction. The State advanced fairly large amounts to the farmers by way of *tagavi*. The amount of *tagavi* advances by the State depended mainly on the condition of the monsoon. In the lean years, large amounts were advanced while in good, they were substantially curtailed, as illustrated by the following figures.

Sl. No.	Year	Amount of tagavi advance (in Rs.)
1	2	3
1	1901-02	151,361
2	1908-09	2,491
3	1911-12	56,720
4	1919-20	423,848
5	1921-22	38,420
6	1926-27	125,949
7	1938-39	21,042
8	1940-41	345,262

Thus prior to the year 1947, the *tagavi* advances from the State and loans by the money-lenders were the principal sources of agricultural finance

These measures fell very short of achieving a solution to the main problem of agricultural indebtedness in the region. After Independence the Government of Saurashtra appointed in 1952 an " Agricultural Debt Inquiry Committee " to investigate the causes of agrarian indebtedness, nature of debt and sources of loan, money-lending agencies, their method and the rate of interest charged, etc., and suggested remedial measures for (i) relief, conciliation and scaling down of debts, (ii) control of money-lending and (iii) alternative agencies to meet the credit requirements of the cultivators. On the basis of the report submitted by that Committee, the Saurashtra Government enacted " the Saurashtra Agricultural Debtors' Relief Act " in 1954. Its aim was helping the farmers settle their accounts with money-lenders in such a way that the latter could not exact unduly high amount by adopting fraudulent practices. The following statement reveals the results achieved.

STATEMENT VI·1

Working of the Saurashtra Agricultural Debtors' Relief Act, 1954, 1954-55 to 1964-65

Year	Number of applications disposed of				Amount involved in applications shown in cols, 2 to 5				Amount by which debts were reduced
	On preliminary issues	By adjudicating debtors as insolvents	By passing awards	For other reasons	Rs.	Rs.	Rs.	Rs.	Rs.
1	2	3	4	5	6	7	8	9	10
1954-55	3	..	13	7	1,000	..	4,400	3,900	4,600
1955-56	50	..	210	112	122,541	..	197,063	189,045	274,669
1956-57	26	..	175	63	22,130	..	90,510	114,060	174,650
1957-58	35	..	295	77	28,945	..	256,090	149,075	230,120
1958-59	9	..	146	22	15,605	..	194,787	99,240	101,480
1959-65	..	..	16	28	..	..	26,498	104,250	13,090
Total	123		855	309	190.221	..	769,288	658,470	798.608

Source :

District and Sessions Judge, Jamnagar

Between 1954-55 and 1964-65 as many as 1,287 applications involving a sum of Rs. 1,617,979 were disposed of by the Civil Courts in the district, reducing the total debt by Rs. 798,608 or 49·36 per cent. A majority of applications was disposed of by passing awards.

Another important measure worth mention was the establishment in 1951 of the Saurashtra Central Co-operative Land Mortgage Bank. Though the primary function of the Bank then was to provide financial assistance to cultivating tenants to obtain occupancy rights over the land held by them, it also provided loans for the purpose of redemption of past debts.

The measures adopted by the Government did provide some relief to the debtor *kheduts* but did not cure the disease. Money-lenders in the region still continued malpractices. The need for regulating them was keenly felt since long. It was with this end in view that the Bombay Money-lenders' Act, 1948 was adopted and applied with effect from February 1960. The main provisions of the Act are : licensing and registration of money-lenders, maintenance of accounts in prescribed forms, furnishing of receipts and statements of accounts to the debtor and fixation of rates of interest on

secured and unsecured loans. While the money-lender, under the scheme of regulated credit, is expected to dispense credit on the principal of social justice. So far as the debtor is concerned, the Act is also intended to have some educative value, the main object being to protect him from the consequences of his reckless borrowing. With his account periodically before him, the debtor, it is expected, will be more vigilant about incurring further liabilities and will also have an opportunity of taking stock of his position from time to time. The maximum rate of interest chargeable by money-lenders is fixed at 12 per cent on secured loans and 15 per cent on unsecured loans. Most of the loans for agricultural purposes being unsecured, agriculturists usually pay interest up to the prescribed rate of 15 per cent per annum ; whereas those pertaining to non-agricultural purposes, mostly being secured, the rate of interest does not exceed 12 per cent per annum. Due to the strict enforcement of the Bombay Tenancy and Agricultural Lands Act, money-lenders cannot take possession of land in satisfaction of their outstanding dues from the agriculturists. They have since then shifted their business from unsecured to secured advances on standing crops or on advance sale of seasonal crops.

Licensed Money-lenders—The following table shows the number of licensed money-lenders and their loan transactions (*not exempted under section 22 of the Act*) in the district.

Licensed Money-lenders and their Loan Transactions, 1961-62 to 1964-65

Period	No. of licences issued for the first time	No. of licences renewed	No. of money-lenders holding valid licences	Loans to Traders (Rs.)	Loans to Non-traders (Rs.)	Total (Rs.)
1	2	3	4	5	6	7
1961-62 ..	27	165	192	..	2,085,631	2,085,631
1962-63 ..	31	171	202	272,851	1,005,334	1,278,185
1963-64* ..	35	174	209	1,132,779	1,231,833	2,364,612
1965† ..	5	171	176	887,031	855,432	1.742,463

Source :

Annual Administration Reports on the working of Money-lenders Act, 1961-62 to 1964-65

* For the period August 1963 to December, 1964

† For the period January to December, 1965

Despite legal checks and controls imposed under the various Acts and alternative agencies providing rural as well as urban finance, the institution of money-lenders has been able on the whole to maintain its utility as can

be seen from the number of licences issued and loans advanced. The decline in recent times, however, goes to show that the business of money-lending is not as profitable as before, as other sources of credit have entrenched upon their former stronghold.

JOINT STOCK BANKS

The joint stock banks, scheduled and non-scheduled, play an important role in the development of trade and industry. In fact, the joint stock banks are one of the most important parts of the organised capital market.

In Jamnagar district, there were twenty branch offices of the joint stock banks in 1964. All of them have their registered offices outside the district. The Central Bank of India Ltd. was the first[1] commercial bank to start banking business in Nawanagar State. At the invitation of the then ruler the late Jam Ranjitsinhji, the bank established its branch office in Jamnagar city as early as 1928. It received good co-operation and patronage from the State and played an important role in the development of its import and export trade. The district possesses three intermediate ports, viz.. Bedi, Sikka and Okha which carry on profitable inland and overseas trade. Similarly industries like cement, chemicals, salt and woollen textiles have greatly developed in the district in recent times.

Expansion of industries has thus provided the necessary impetus to the growth of banking operations in the district.

The following were the banking institutions in the district as on 31st December, 1964.

Sl. No.	Name of the Bank	Location	Year of establishment
1	2	3	4
1	The Bank of Baroda Ltd. ..	.. Dwarka	1926
2	The Central Bank of India Ltd. ..	.. Jamnagar (Mandvi Tower)	1928
3	The Bank of Baroda Ltd. ..	.. Mithapur	1941
4	The Central Bank of India Ltd.	.. Khambhalia	1945
5	The Central Bank of India Ltd. ..	.. Jamjodhpur	1945
6	The Central Bank of India Ltd.	.. Jamnagar (Grain Market)	1947
7	The Punjab National Bank Ltd. ..	. Jamnagar	1947
8	The United Commercial Bank Ltd.	.. Jamnagar	1948
9	The Dena Bank Ltd. ..	.. Jamnagar (Kapad Bazar)	1949

1 However, the branch office of the Bank of Baroda Ltd. opened in the year 1926 at Dwarka could be considered to be the first branch of a commercial bank opened in the district.

Sl. No.	Name of the Bank	Location	Year of establishment
1	2	3	4
10	The Union Bank of India Ltd.	Jamnagar	1950
11	The Bank of Baroda Ltd.	Jamnagar	1950
12	Saurashtra State Co-operative Land Mortgage Bank Ltd.*	Jamnagar	1951
13	The State Bank of Saurashtra	Jamnagar (Ranjitsagar Road)	1952
14	The State Bank of Saurashtra	Khambhalia	1954
15	The State Bank of Saurashtra	Jamjodhpur	1955
16	Jamnagar Vibhagiya Nagrik Sahkari Bank Ltd.*	Jamnagar	1955
17	The State Bank of India	Okha	1958
18	The District Central Co-operative Bank Ltd.*	Jamnagar,	1959
19	The Central Bank of India Ltd.	Jamnagar, (Gandhi Chowk)	1961
20	The Bank of India Ltd.	Jamnagar	1961
21	The State Bank of Saurashtra	Jamnagar (Digvijay Plot)	1963
22	The Dena Bank Ltd.	Jamnagar, (Grain Market)	1963
23	The State Bank of Saurashtra	Dwarka	1964

*Details of these banks appear in the section entitled " Co-operative Credit Societies and Banks" pp. 273-278

Out of twenty branches of various commercial banks in the district, as many as twelve were located in Jamnagar city alone. This shows the concentration of banking facilities in the areas where urbanisation and industrialisation are relatively greater. During the pre-Independence period, the Central Bank of India Ltd. was the only joint stock bank in Nawanagar State. The patronage enjoy by this bank from the rulers of Nawanagar deterred other banks from opening their branches in the State. The growth of joint stock banking in the district is, however, spectacular after Independence. With the opening of a branch of the Punjab National Bank Ltd. in 1947, other banks started their branches which at the end of 1964 rose of fifteen opened by seven other joint stock banks besides the Central Bank. Of ten talukas in the district, only four, viz., Jamnagar, Khambhalia, Dwarka, and Jamjodhpur enjoyed this facility till 1964, to which Dhrol and Kalavad were added in 1965. Moreover as the State Bank of Saurashtra operates pay offices at Bhanvad and Jodiya.[1] the only talukas of the district without this facility are Lalpur and Kalyanpur.

The main business of these banks is to attract deposits—current, fixed and savings—and to finance various sectors of economy, mainly industry, trade and commerce. The extent of deposits collected by them in the district during the years 1962 and 1964 is shown in Statements VI·2 and VI·3 given below

1 The difference between the Pay office and the regular branch office is that the former is in charge of a Senior clerk responsible to the Manager of the branch office, called the parent branch.

STATEMENT VI·2

Deposits of Joint Stock Banks, 1962

(RUPEES IN THOUSANDS)

Sl. No.	Particulars	Fixed deposits		Current deposits		Savings deposits		Other deposits		Total deposits	
		No. of accounts	Amount Rs.	No. of accounts	Amount Rs.	No. of accounts	Amount Rs.	No. of accounts	Amount Rs.	No. of accounts	Amount Rs.
1	2	3	4	5	6	7	8	9	10	11	12
1	Manufacturing concerns ..	..	..	437	2,686	..	.	3	25	440	2,711
2	Trading concerns ..	..	..	2,897	7,359	..	..	22	911	2,919	8,270
3	Banking companies ..	..	..	19	1,686	..	..	..	..	19	1,686
4	Business	114	5,373	..	..	4	14	..	..	118	5,387
5	Public institutions and trusts	47	3,601	..	..	..	..	..	..	47	3,601
6	Personal	3,515	19,506	2,062	5,643	16,312	17,298	692	6,701	22,581	49,148
7	Others	43	1,703	376	3,572	214	339	33	1,107	666	6,721
	Total	**3,719**	**30,183**	**5,791**	**20,946**	**16,530**	**17,651**	**750**	**8,744**	**23,790**	**77,524**

Source :

Compiled from the information supplied by the Joint Stock Banks in Jamnagar district.

STATEMENT VI-3

Deposits of Joint Stock Banks, 1964

(RUPEES IN THOUSANDS)

Sl. No.	Particulars	Fixed deposits		Current deposits		Savings deposits		Other deposits		Total deposits	
		No. of accounts	Amount Rs.	No. of accounts	Amount Rs.	No. of accounts	Amount Rs.	No. of accounts	Amounts Rs.	No. of accounts	Amount Rs.
1	2	3	4	5	6	7	8	9	10	11	12
1	Manufacturing concerns	..	..	827	5,485	..	..	4	17	831	5,502
2	Trading concerns	..	..	3,534	11,376	..	.	44	145	3,578	11,521
3	Banking companies	..	..	19	2,780	..	..	101	72	120	2,852
4	Business	150	3,276	..	.	82	379	..	..	232	3,656
5	Public institutions and trusts	54	1,469	..	.	..	..	..	.	54	1,469
6	Personal	4,894	30,929	1,659	4,496	21,651	24,839	854	2,500	29,058	62,764
7	Others	74	2,265	373	2,788	115	422	46	444	608	5,919
	Total	5 172	37,939	6 412	26,925	21 848	25,640	1,049	3,178	34,481	93,662

Source :

Compiled from the information supplied by the Joint Stock Banks in the Jamnagar district.

A study of these statements reveals that the year 1964 showed a considerable increase in the business of these banks as compared to the year 1962, both in respect of the total number of depositors and amount deposited.

The average deposits per account in 1962 and 1964 were Rs. 2,510 and Rs 2,700 respectively. Preponderance of fixed deposits accounted for 38·93 per cent and 40·50 per cent of the total deposits both in 1962 and 1964. Among the various categories of depositors the largest contribution is made by individual depositors who accounted for 63·42 and 66·97 per cent respectively of the total deposits during these years.

Statement VI.4 gives details of the advances made by banks in the district. They reveal that the percentage of advances to total deposits was 53·54 in 1962 and 56·47 in 1964. Of the total advances made during 1962 and 1964, those to industries were the largest, being Rs. 23,944,000 or 57·69 per cent in 1962 and Rs. 32,373,000 or 61·20 per cent in 1964. Commerce came next accounting for Rs. 9,858,000 or 23·75 per cent in 1962 and Rs. 18,418,000 or 34·80 per cent in 1964. Advances in the agricultural sector were insignificant and those to cottage industries negligible.

STATEMENT VI·4

Loan Advances by Joint Stock Banks according to Purpose, 1962-64

(ADVANCES IN THOUSAND RUPEES)

		Year ended 31st Dec. 1962			Year ended 31st Dec. 1964		
Sl. No.	Particulars	Number of accounts	Amount Rs.	Percentage to total advances	Number of accounts	Amount Rs.	Percentage to total advances
1		2	3	4	5	6	7
1	Industry	128	23,944	57.69	209	32,373	61.20
2	Commerce	282	9,858	23.75	392	18,418	34.80
3	Agriculture	..	..	..	2	6	0.01
4	Personal and professional	132	865	2.09	139	685	1.30
5	All others .. .	148	6,836	16.47	26	1,423	2.69
	Total .. .	690	41.503	100 00	768	52.905	100.00

Source :

Compiled from the information supplied by the Joint Stock Banks in the Jamnagar District.

Recent Trends—With a view to channelising the huge resources of these banks on priority basis in various sectors of the country's economy, the

Government of India have decided to impose certain social controls. The finances of these banks which have hitherto been utilised mainly by industry, trade and commerce are now to be diverted towards the development of agriculture and cottage industries also. A directive to this effect has been issued by the Reserve Bank of India advising them to extend their operations to agricultural advances as well. Measures of social controls envisage the appointment of a full time president by the Government on the recommendations of the Reserve Bank of India. The Board of Directors will be broad-based so as to provide representation to the economists, artisans, agriculturists and co-operators by restricting the representation to the industrialists to the extent of 50 to 60 per cent. A National Credit Council has lately been formed with the Deputy Prime Minister as Chairman and the Governor of the Reserve Bank as Vice-Chairman for framing the credit policies in accordance with the developmental and defence needs of the country. Its main functions are to assess the demand for bank credit for the various sectors of the economy, determine priorities for the grant of loans and advances for investment having regard to the availability of resources and requirements of the priority sectors, in particular agriculture, small scale industries and exports, co-ordinate the lending and investment policies as between commercial and co-operative banks and specialised agencies to ensure optimum and efficient use of the overall resources and consider other allied issues as may be referred to it by the Chairman or the Vice-Chairman.

Suitable legislation called the Banking Laws (Amendment) Bill, 1967 has been recently introduced in the Parliament which proposes a number of steps to achieve this objective, including the reconstitution of boards of directors of banks and the appointment of full time Chairman, who will be a professional banker and the chief executive officer.

Co-operative Credit Societies and Banks

Co-operative movement had made very little headway in this district during the regime of Nawanagar State. But with the adoption by Government of objective of socialistic pattern of society after Independence, co-operation has received greater attention than hithertofore as an important means to achieve it.

The growth of co-operative movement is thus of a very recent origin in the district. Before the initiation of the Five Year Plans, only five per cent of the total population was covered by co-operatives in the district. The Jamnagar Refugee Co-operative Housing Society was the first co-operative society to be registered in 1948. The number of societies rose to nine in 1949. But the movement got momentum during the First and Second Five Year Plans when more and more economic activities were brought within its fold. From 41 in 1951-52, the number of societies rose to

574 in 1964-65. A short description of different types of societies is given below to give an idea of the development and progress made by the co-operative movement in the district.

The co-operative sector as a whole is dominated by agricultural credit which accounts for nearly sixty per cent of the total number of societies. And this is as it should be. For agriculture is the dominant sector of economic activity which needs it the most. With a view to step up agricultural production the societies have provided sizeable amount of credit to member cultivators to enable them to purchase seeds, manures and cattle. Other types of societies have so far lagged behind.

Agricultural Credit Societies—Out of a total of 574 societies functioning in the district in 1964-65, as many as 335 or 58·36 per cent were agricultural credit societies. All the villages in the district have been covered by these societies. They disburse short and and intermediate term credit to cultivators. Short term loans enable the cultivators to meet immediate needs such as purchase of seeds, manures, etc. Those for intermediate terms are advanced for the purchase of cattle and repayment of old debts. Loans disbursed are mostly on personal security of the member supplemented by two good sureties, who are members of the society and sometimes against immovable property.

With the introduction of the Saurashtra Agricultural Debtors' Relief Act in 1954 and with the application of the Bombay Money-lenders' Act to the Saurashtra region from 1960, agricultural credit societies are called upon to play a greater role in the field of rural finance. Service co-operatives have been introduced since 1959 for revitalising stagnant agricultural credit societies. Besides disbursing credit, these societies supply improved seeds and fertilisers, agricultural tools and implements and run consumer stores. Out of a total of 335 agricultural credit societies in the district in 1964-65, 231 were service co-operatives.

Statement VI.5 showing the working of the various types of agricultural credit societies in the district, is appended at the end of the Chapter. It reveals an overall expansion in the activities of these societies during the quinquennium ending 1964-65. Spectacular increase is noticed in respect of deposits which expanded from Rs. 73,856 to 245,700 registering an increaes of more than 300 per cent and of working capital from Rs. 9,072,783 to 17,773,400 which very nearly doubled during the same period. Their loan operations also show a steady growth.

Non-agricultural Credit Societies—These societies which also include urban banks are usually situated in towns to cater to the credit requirements of their members who are generally traders, artisans, factory workers,

salary earners, etc. Urban co-operative banks, urban credit societies, salary earners' societies, mill hands' societies, factory workers' societies, thrift and credit societies, etc., are included in this group. There does not seem to be much difference between the constitution and management of urban societies and urban banks. Only those urban credit societies which are allowed to do banking business according to the standard and criteria laid down can use the word 'bank' as part of their names. The working of these societies including urban co-operative banks is also given in Statement VI.5 appended at the end of the Chapter. Non-agricultural credit seems to have remained at a standstill, though its working has slightly expanded. Whatever the increase noticed in respect of the number of societies, membership or working capital is only marginal. The district has three urban co-operative banks one each at Jamnagar, Dhrol and Khambhalia, the Jamnagar Vibhagiya Nagrik Sahakari Bank Ltd., Jamnagar, being the most important among them. Since its registration in 1955 the activities of the bank have expanded both in terms of membership and working funds. From 3,217 in 1961-62, the membership rose to 3,981 in 1964-65 and the working capital from Rs. 540,000 to 565,000. Loans advanced and deposits have likewise shown a similar trend.

Non-credit Co-operatives—In the non-credit sector, both agricultural and non-agricultural, marketing, cattle-breeding, consumers' stores, housing and labour contract co-operatives have made good progress in recent times. Some of the new fields to which this activity has been extended are dairy, co-operative farming, fisheries, and a few cottage and household industries like weaving, tanning, etc. The inflationary spiral of rising prices generated during the War and post-War years, continues unabated causing hardship to the weaker sections of the community and the middle classes. Consumers' co-operatives have helped in arresting this rise by supplying articles of necessity to consumers at fair and reasonable prices. Mention may be made of the Tatakem Co-operative Store, Mithapur and the Industrial Consumers' Co-operative Store, Sikka, run by the employees of these factories. Besides the sale of consumer goods, both controlled and uncontrolled, at reasonable rates, they also run a canteen, work a flour mill and provide facility of bus service to their members. Want of living space has accelerated construction activities in recent times and helped formation of an appreciable number of housing co-operatives in urban areas.

District Central Co-operative Bank Ltd., Jamnagar—The Jamnagar District Central Co-operative Bank Ltd., which was registered in May, 1959, started functioning from March, 1960, when the assets and liabilities pertaining to the Jamnagar district were transferred by the former Saurashtra State Co-operative Bank which was working both as the State Co-operative Bank as also the central financing agency in Saurashtra before its conversion into Gujarat State Co-operative Bank from May, 1960. The Jamnagar District

Central Co-operative Bank had ten branch offices in the district in 1965 in addition to its head office in Jamnagar city and covered all talukas of the district. It provides necessary finance to the agricultural credit societies through its branches for such purposes as (1) short term loans to primary agricultural credit societies for raising crops, (2) medium term loans for capital investment like purchase of bullocks, milch cattle, cart, implements, etc., (3) marketing loans, (4) hypothecation, and (5) cash credits against general assets. The financial resources of the Bank consist of share capital and deposits and borrowings from the Reserve Bank of India as also from the Gujarat State Co-operative Bank.

The following statement shows the nature and magnitude of operations of the bank in the district.

STATEMENT VI-6

Operations of Jamnagar District Central Co-operative Bank Ltd., 1960-61 to 1964-65

(RUPEES IN THOUSANDS)

Sl. No.	Particulars		1960-61	1961-62	1962-63	1963-64	1964-65
1	2		3	4	5	6	7
1	No. of members						
	(a) Individuals ..		9	16	16	16	16
	(b) Societies ..		384	387	421	451	470
2	Paid up share capital ..	(Rs.)	1,157	1,706	2,016	2,566	2,964
3	Reserve and other funds	(Rs.)	81	177	250	315	430
4	Total deposits ..	(Rs.)	3,968	3,704	2,485	4,148	5,644
5	Working capital ..	(Rs.)	9,490	12,248	12,658	18,540	16,715
6	Investments including fixed deposits	(Rs.)	..	429	672	672	922
7	Total loans and advances	(Rs.)	5,225	6,451	7,479	6,670	6,961
	(a) Short term ..	(Rs.)	4,897	5,430	5,957	6,170	6,335
	(b) Medium term ..	(Rs.)	328	1,021	1,522	500	626
8	Loans outstanding ..	(Rs.)	5,228	6,902	9,360	8,528	10,691
9	Recoveries	(Rs.)	3,751	4,777	4,081	2,964	10,913
10	Overdues	(Rs.)	1,306	1,247	1,559	2,017	2,734

Source :

Manager, District Central Co-operative Bank Ltd., Jamnagar

The above statement reveals that the membership share capital, reserve, other funds, etc., have recorded a remarkable rise year after year. As regards the advances made by the bank, it can be seen that though the short term advances of the bank show an upward trend, medium term advances have

declined considerably due to the policy of the bank to discourage such advances. Recovery was not always satisfactory, probably due to the prevalence of scarcity conditions caused by uneven and scanty rainfall in the district.

Gujarat State Co-operative Land Development Bank—Nearly 33 per cent of the total area under cultivation in Saurashtra in 1948 was in the possession of Girasdari tenants, who were mere tenants-at-will and had no incentive to improve the land cultivated by them as they could not reap the fruits of their own labour. To remove these handicaps, the former Government of Saurashtra enacted various measures of land reforms, whereby tenants were enabled to become occupants of the land cultivated by them on the payment of compensation to the Girasdars. As the tenant cultivators had not the means to pay the compensation due to the Girasdars, a provision was made in the Land Reforms Act, 1951 for the establishment of a Co-operative Land Mortgage Bank. The Saurashtra Central Co-operative Land Mortgage Bank was thus registered on 6th September, 1951 with the specific purpose of providing the tenants with the finance required for obtaining occupancy rights over the land held by them. By the end of 1956 the Bank advanced Rs. 25,534,771 to 50,907 Girasdari tenants in Saurashtra. In Jamnagar district the Bank advanced Rs. 1,267,446 to 3,298 tenants between 1951-52 and 1955-56 for purchasing occupancy rights. In the early years of its growth, the Bank advanced loans only for the purchase of occupancy rights. As the *tagavi* loans were granted by the Revenue Department under two wellknown Acts, viz., (1) The Land Improvement Act, 1883, and (2) The Agriculturists' Loans Act, 1884 as adapted and applied to Saurashtra. Government decided to transfer gradually the work of granting developmental loans also to the Bank. Pursuant to this decision the Bank opened branches at all the community project centres in the region for making long term advances for agricultural improvement.

After the formation of Gujarat as a separate State, the area of its operation was extended to cover the entire State from May, 1960. From this date onwards, it has been functioning as an apex institution and was renamed Gujarat State Co-operative Land Development Bank in 1964. The entire work of providing long term finance under the Five Year Plans is handed over to this Bank. In Jamnagar district, the Bank functions through its ten branches located at each taluka headquarters.

The various purposes for which loans are granted by the Bank are : (1) construction of new wells and repairs to old ones, (2) purchase of oil-engines, electric motors and pumping sets, (3) purchase of tractors, (4) bunding, (5) construction of farm houses and machine rooms (6) redemption of old debts, (7) raising coconut plantations and (8) allied purposes.

There has been a progressive rise in the membership and share capital of the Bank. While the former rose from 17,195 in 1960-61 to 35,191 or 104·65 per cent in 1964-65, the latter increased from Rs. 935,254 to 2,174,143 or 132·46 per cent during this period. A fluctuating trend is noticed in respect of advances made by the Bank, which rose in lean years and dropped down, when the rainfall was adequate. During the years of scarcity and famine, the amount of loans advanced by the Bank to farmers are the highest and recovery the lowest. This is reflected in the advances which amounted to Rs. 6,042,226 and Rs. 9,540,911 and recovery Rs. 2,366,531 and Rs. 1,654,387 in 1962-64. Another noteworthy feature was the relatively large amounts of loans advanced for the construction of and repairs to wells which amounted to 63·42 per cent of the total amount lent in 1963-64. During the quinquennium ending 1964-65 comparatively larger amounts were lent for the purchase of oil-engines, electric motors and pumping sets.

OTHER SOURCES

Small Savings--Small Savings schemes have been devised by Government mainly with a view to mobilise public savings and to raise funds for financing the development projects. It also encourages the habit of thrift among the people. The scheme dates back to the First World War, 1914-18, when the Government of India introduced postal cash certificates for the first time. During World War II, the Government of India started in 1943 post office National Savings Scheme with a view to withdraw excess purchasing power of the people generated on account of increased War expenditure and also to check the inflation created by War conditions.

During the post-Independence period, the Government of India offered a wide range of securities under small savings at attractive rates of interest as it saw great potentialities for developing them to a great extent to finance its diverse activities including the Five Year Plans. The securities offered are 12-Year National Defence Certificates, 10-Year Defence Certificates,[1] 15-Year Annuity Certificates and the Cumulative Time Deposit Scheme. Yet another important source of small savings is the Post Office Savings Banks. On account of their wide net-work extending up to the rural areas they have proved much useful in collecting the savings of the public.

The statement that follows illustrates the extent of investment attracted by the various Small Savings Schemes between 1961-62 and 1964-65.

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1. National Defence Certificates and Defence Deposit Certificates were introduced from 1st November, 1962 replacing the old National Plan series and the Treasury Savings Deposit Certificates respectively.

STATEMENT VI.7

Small Savings, 1961-62 to 1964-65

(RUPEES IN THOUSANDS)

Year	12-Year National Plan Savings Certificates / 12-Year National Defence Certificates			10 Year Treasury Savings Deposit Certificates / 10-Year Defence Deposit Certificates			15-Year Annuity Certificates		
	Gross	Discharge	Net	Gross	Discharge	Net	Gross	Discharge	Net
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	2	3	4	5	6	7	8	9	10
1961-62	2,875	903	1,382	183	31	152	..	..	(-)09
1962-63	3,462	1,265	2,107	270	9	261	..	..	..
1963-64	3,925	1,300	2,025	72	..	72	..	..	..
1964-65	3,393	1,548	1,845	19	50	31	..	..	..
Total	13,655	..	..	544	.	..	..	..	..

Year	Cummulative Time Deposit Scheme			Post Office Savings Bank			Total		
	Gross	Discharge	Net	Gross	Withdrawal	Net	Gross	Discharge	Net
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
1	11	12	13	14	15	16	17	18	19
1961-62	27	..	27	5,036	4,073	963	8,121	5,106	3,015
1962-63	68	..	68	2,816	5,144	(-)2,328	6,616	6,418	198
1963-64	66	..	66	2,664	2,913	(-)249	6,727	4,213	2,514
1964-65	67	1	66	3,323	2,800	523	6,802	4,399	2,403
Total	228	..	..	13,839	..	..	28,266	..	..

Source : Regional Director of Small Savings, Ahmedabad

Next to post office saving banks, investment in 12-Year National Plan and Defence Certificates was the most popular and rose from Rs. 2,875,000 to 3,393,000 or 48 30 per cent of the gross deposits collected between 1961-62 and 1964-65. Money deposited by the public in the Cumulative Time Deposit Scheme also increased steadily from Rs 27,000 to 67,000 during the same period. Decline is noticed in respect of deposits in the post office savings banks. The years 1962-63 and 1963-64 were scarcity years when large amounts were withdrawn by the public.

Prize and Premium Bonds—The Prize Bonds and the Premium Prize Bonds,[1] introduced respectively in 1960 and 1963 also played an important role in collecting the savings of the public. They were issued in the denominations of Rs. 5 and Rs. 100. The amount realised through their sale in the district was Rs. 489,450 in 1960, but gradually declined to Rs. 78,270 in 1964.

Insurance— Agencies doing insurance business play an important role in tapping a portion of the public savings through the collection of insurance

1. The sale of Prize Bonds was discontinued from 31st December, 1964

premia. With the nationalisation of life insurance business in 1956, the Life Insurance Corporation of India has become the foremost and the largest single agency doing life insurance business in India. The Corporation was constituted by a Parliamentary enactment in 1956 and was officially constituted on 1st September, 1956. From this date all insurance companies-Indian and foreign—ceased to carry on life insurance business anywhere in India. However, general insurance business which includes fire, marine accident, etc., was kept open to private enterprise. From April, 1964 the Life Insurance Corporation has also opened its General Insurance Department, which competes with private agencies in the field of general insurance.

In the organisation and administrative set-up of the Life Insurance Corporation, Jamnagar district is placed under the territorial jurisdiction of the Rajkot Division. The branch office of the Corporation at Jamnagar covers the entire district. The number of agents canvassing life and general insurance business in the district numbered 349 in 1965. The total business canvassed by the Corporation between 1963 and 1965 is shown below.

Operations of the Life Insurance Corporation, 1963-65

Year	Business completed		
	No. of policies issued	Total sum assured under them Rs.	Total premium collected Rs.
1	2	3	4
1963	4,339	13,601,750	2,967,901
1964	2,173	8,105,000	3,416,871
1965	3,634	13,381,000	7,189,676

The above statistics relate only to the Corporation's activity in the field of life insurance. They show a large increase in the business of the Corporation, and adverse effects of scarcity in 1964. As the General Insurance Department has started functioning only recently its impact in this field is small.

Six private insurance companies carrying on general insurance business in the district in 1966 were ; (1) Indian Mercantile Insurance Company Ltd., (2) L' Union Fire, Accident and General Insurance Co., Ltd., (3) Vulcun Insurance Company Ltd., (4) Home Insurance Company Ltd., (5) Prachi Insurance Company Ltd., and (6) British India Insurance Company Ltd.

Unit Trust—The Unit Trust of India has been created under the Unit Trust of India Act, 1963 to afford the small investor means of acquiring a share in the widening prosperity, based on stedy industrial growth of the

country. The scheme combines the advantages of a minimum risk with a reasonable return. It helps in the mobilisation of resources and their channeling into investments by increasing the overall productivity of capital and providing funds required for the development plans. The face value of each unit is kept Rs. 10 with a view to attract a large number of small investors. The Trust pools savings of the community and invests them in different types of securities such as Government securities, industrial debentures, preference shares and equities in a manner which offers to the individual investor reasonable return on his savings. Being always ready both to sell and to buy its units at stated prices, the Trust offers an additional advantage of liquidity of investment. The Unit Trust has been provided with an initial capital of Rs. 5 crores contributed by the Reserve Bank of India, Life Insurance Corporation, State Bank of India and its subsidiaries and scheduled banks and other specified financial institutions. Its management is vested in a Board of Trustees consisting of a Chairman appointed by the Reserve Bank of India. One of the important concessions provided by the Unit Trust Act is exemption from income tax on dividend up to Rs. 1,000.

Stock Exchange—There is no stock exchange in this district

Private and Public Limited Companies—Besides insurance establishments and banks, limited companies, private and public, play an important role in attracting, savings to finance diverse economic activities such as manufacturing, trading transport and the like for which they are organised. Company finance thus constitutes an important aspect in the study of financial resources in the economic structure of a district. .

Private Limited Companies—There were 18 registered private limited companies in the district during the year 1963-64. Of these, only three were registered prior to Independence. The first to be registered was in 1936. Their classification according to the nature of business transacted together with their paid-up share capital during the year 1963-64 is given below.

Private Limited Companies, 1963-64

Sl. No.	Type of companies	No. of concerns	Paid-up capital(Rs.)
1	2	3	4
1	Paints, varnishes and allied products ..	2	3,495,000
2	Salt works	2	1,766,000
3	Cement, iron, etc.	4	1,390,000
4	Construction and maintenance ..	2	1,305,000
5	Textiles and cotton ginning and pressing ..	2	1,177,000
6	Investment and trust . ..	2	1,100,000
7	Transport co.	1	180,000
8	Miscellaneous	3	659,500
	Total	**18**	**11,072,500**

Source:
Registrar of Companies, Gujarat State, Ahmedabad

Public Limited Companies—Public limited companies have an advantage over the private limited companies in that whereas the private companies sometimes suffer from the paucity of funds, the public limited concerns invite the public at large to invest their savings in the shares issued by them. This distinction makes their investment spread fairly widely. In 1963-64 there were eight such companies of which four were registered prior to Independence. These companies are classified below according to the nature of business transacted and paid-up share capital.

Public Limited Companies (Classified by Industries) 1963-64

Sl. No.	Type of companies	No. of concerns	Paid up capital Rs.
1	2	3	4
1	Cement	1	23,999,500
2	Tiles, potteries and spum pipes	2	2,409,450
3	Textiles	2	4,705,850
4	Salt and allied industries ltd.	1	770,000
5	Transport	1	687,100
6	Managerial service	1	1,000,000
	Total	8	33,571.900

Source :

Registrar of Companies, Gujarat State, Ahmedabad

Among private limited companies, paints, varnishes and colour manufacturing occupies an important place. Out of a total paid-up capital of Rs. 11,072,500 this group accounted for Rs. 3,495,000 or 31·6 per cent. Among the public limited companies, cement manufacture by Shree Digvijay Cement Co. Ltd., Sikka, occupies a pride of place. Its paid-up capital was to the tune of Rs. 23,999,500 which comes to nearly 71 per cent of the total paid-up capital of all such companies in the district. The total paid-up capital of both these sectors was of the order of Rs. 44,644,400. of which public limited companies accounted for Rs. 33,571,900 or 75·19 per cent, while the private limited companies accounted for Rs. 11,072,500 or 24·81 per cent. It is interesting to note that though the number of private limited companies in the district was more than double that of public limited companies, the paid-up capital of the latter was nearly three times higher than that of the former, the average paid-up capital of a private limited company being Rs. 615,140 as against Rs. 4,196,487 for a public limited company.

State Assistance to Industrial Development : Nawanagar State

Despite good potentialities of mineral, marine and agricultural resources, industrial development in Saurashtra was, prior to Independence,

confined to a few of the progressive States and Nawanagar was one of them. Among the several factors responsible for this apathy, general shyness of capital on account of insecurity of investment in princely areas was the chief reason. To promote commerce and industries in the State, the Nawanagar State had created the Department of Commerce and Industries in 1918. Special facilities were granted to manufacturing industries and handicrafts. Patents and trade marks were registered for the protection of inventors and designers. Development of Bedi port and the construction of railway lines were the two important factors which encouraged the establishment of a number of industries in the State. As a result of liberal and generous policy of the ruler, transport facilities by sea and rail, and certain concessions the number of factories which was only seventeen in 1907 rose to over 200 in 1931.[1]

Saurashtra—Soon after the integration of State, Saurashtra Government took a number of measures to promote industrialisation in the region by encouraging the establishment of small and large industries. Besides providing land and power at concessional rates, the Government created the Saurashtra Industrial Finance Corporation in September, 1953, with an authorised capital of Rs. 2 crores, to cater to the financial needs of those large industries which could not get loans from the Industrial Finance Corporation of India. Small Scale and Cottage Industries Board, Khadi and Village Industries Board, Handloom Board, etc., were also set up to encourage the growth of small scale and cottage industries and provide them with necessary finance. Still further fillip was provided by Government to the small scale industries by establishing the Saurashtra Small Industries Co-operative Bank in 1956 under the Saurashtra Co-operative Societies Act. With the integration of Saurashtra State into the bilingual Bombay State in 1956, financial assistance to industries also came to be given under various schemes then in force in Bombay State.

Saurashtra Small Industries Co-operative Bank Ltd., Rajkot—The Bank was registered at Rajkot on May 14, 1956 to advance short, medium and long term loans to the urban co-operative banks, industrial co-operative societies and individuals to enable them to purchase raw materials, machinery and other appliances and build workshops and also provides finance for working capital. It thus helps establish new industries or develop and expand existing units on individual or co-operative basis. Its area of operation was extended to Kutch district from 1957-58. In 1964-65 the bank advanced Rs. 118,900 to 15 individual units and Rs. 81,000 to three units sponsored on co-operative basis in Jamnagar district.

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1. *Nawanagar*—Summary of Progress in the Nawanagar State during the regime of H. H. the Maharaja Jam Saheb Shri Ranjitsinhji Bahadur from 1907 to 1931, p. 37.

Gujarat—The newly created State of Gujarat has been taking active interest in the development of industrial resources by taking concerted measures to meet the financial needs of industries, small and large. The agencies established by the Government of Gujarat for providing finance to these industries are ; (i) Gujarat Small Industries Corporation, Ahmedabad, (ii) Gujarat State Financial Corporation, Ahmedabad, (iii) Gujarat Industrial Development Corporation, Ahmedabad, and (iv) Financial assistance under the State Aid to Industries Rules.

(i) *Gujarat Small Industries Corporation*—Incorporated as a public limited company on 16th March, 1962, it had an authorised capital of Rs. 50 lakhs. The Government not only subscribed 40 per cent of the share capital but also guaranteed dividend to share holders at the rate of 4 per cent per annum. The aim of the Corporation is to assist, protect and promote interests of small scale industries in the State, to provide technical and managerial assistance and help in procurement of raw materials, machinery, equipment, tools and appliances. It assists small industries by (1) providing raw materials, (2) importing in bulk against actual users' import licences held by small scale units, (3) supplying machinery on hire purchase basis and (4) marketing their products. The Corporation has, since its inception in 1962, supplied machinery which included Capstan Lathe and Spindle Automatic Lathe with standard equipment valued at Rs. 29,925 to the Bharadia Industries in Jamnagar district in 1965.

(ii) *Gujarat State Financial Corporation*—The Gujarat State Financial Corporation was established under the State Financial Corporations Act, 1951, on May 1, 1960 by the Government of Gujarat with the object of providing financial accommodation to small, medium and large industries for acquiring capital and productive assets like land, building, plant and machinery for expansion, renovation or modernisation. Such loans are granted usually for a period of 7 to 10 years. The Corporation also acts as an agent to the State Government and is delegated powers to receive, consider, sanction and disburse loans beyond Rs. 10,000 with a maximum of Rs. 25,000 under the State Aid to Industries Rules, from the funds placed at its disposal by the Government. The Corporation, has, since its inception, considered and sanctioned applications from four industrial units in this district involving a sum of Rs. 32,000 till 1964-65, under Agency Agreement with the Government. Loans exceeding Rs. 25,000 but below Rs. 1,000,000 are granted to all industrial concerns other than public limited companies or registered co-operative societies. The latter are eligible for loans up to Rs. 2,000,000 which the Corporation sanctions from its own funds and under its own rules and regulations. The total advances to the tune of Rs. 1,467,000 were made by the Corporation from its own funds to seven industries in the district since it started functioning.

Operations of Gujarat State Financial Corporation, 1960 to 1965

Year	No. of applications sanctioned	Amount involved Rs.
1	2	3
October 1960 to March 1962	2	1,000,000
1962-63	3	42,000
1963-64	1	300 000
1964-65	1	125,000

Source :

Annual Reports of the Gujarat State Financial Corporation, Ahmedabad, 1961-62 to 1964 65

(iii) *Gujarat Industrial Development Corporation*—It was created in 1962 to establish and manage industrial estates, to develop industrial areas and to undertake schemes either jointly with the State Government and local bodies or on agency basis.

No industrial estate has been established by the Corporation in this district since it started functioning in 1962.

(iv) *Financial Assistance by State Government*—In addition to the institutions formed by Government for financing small, medium and large industries, the State Directorate of Industries also provides financial assistance to small industries up to Rs. 10,000 under the State Aid to Industries Rules, 1935. The Registrar of Co-operative Societies too meets the financial needs of cottage industries under different schemes which can broadly be divided into two groups—(a) scheme for granting loans and subsidies to individual artisans and entrepreneurs and (b) scheme for giving financial assistance to industrial co-operatives. Under the first scheme financial assistance is provided to the educated unemployed, bona-fide craftsmen and backward class artisans for the purpose of starting or developing cottage industries. Under the second, assistance is given to the different types of industrial co-operative societies like forest labour and labour contract and those organised by artisans like weavers, oil-crushers, tanners, carpenters, blacksmiths, potters, bricks layers, etc., for the purchase of tools and equipment. Fifty per cent of the assistance sanctioned is treated as subsidy in deserving cases. The assistance provided under the scheme amounted to Rs. 17,861, in 1964-65. Of this sum, Rs. 9,711 were treated as subsidy.

With a view to achieve further industrial expansion in the country, the Government of India has created the (i) Industrial Finance Corporation, (ii) National Industrial Development Corporation and the (iii) Industrial Credit and Investment Corporation of India. These institutions advance medium and long term loans to industries in public and private sectors. The purposes for which they are established and the extent of finance provided by them to the industrial units in the district are narrated below.

(i) *Industrial Finance Corporation of India*—This Corporation was created in 1948 by a Parliamentary enactment to provide medium and long term finance to industries promoted by public limited companies and co-operative societies. Industries engaged in the manufacture, preservation or processing of goods, or in the shipping, mining or coal industry or in the generation or distribution of electricity or any other form of power, are eligible for financial assistance from this body. In the year 1965-66 the Corporation advanced loans worth Rs. 30 lakhs and Rs. 157·50 lakhs respectively to the Digvijay Cement Co., Sikka, and the Tata Chemicals at Mithapur, for the expansion of installed capacity of these factories.

(ii) *National Industrial Development Corporation*—Started by the Government of India as a Government owned private limited company in 1954. the Corporation is authorised to start new industries with Government money in spheres where the size of capital required or the risks involved deter private capital. It also secures foreign technical collaboration in preparing project reports concerning new industries. No unit in the district has thus far been brought under the purview of this scheme.

(iii) *Industrial Credit and Investment Corporation of India*—The Corporation was established in 1955 as a privately owned financial institution to encourage and assist industrial investment in India. It advances loans to industries in the private sector. These loans are secured either against the assets of the company or guaranteed by banks or insurance companies. The corporations' authorised capital is Rs. 25 crores. Its paid-up capital of 5 crores is subscribed by Indian banks, insurance companies, general public, foreign financial institutions and subscribers in the United Kingdom and the U. S. A.

No industry in the district has so far obtained any financial assistance from this agency.

Other Institutions—Banking institutions like the State Bank of India and its subsidiaries and the Industrial Development Bank also provide financial aid. The former meets the requirements of small scale industries under the Pilot Scheme The Industrial Development Bank, as the subsidiary of the Reserve Bank, co-ordinates the activities of other lending institutions and also provides direct financial assistance. The method of their working is described below.

The Industrial Development Bank—The Industrial Development Bank was established in 1964 as an apex all-India institution to co-ordinate the activities of other financial institutions, to provide direct financial assistance to industrial units and to bridge the gap between the supply of and demand

for medium and long term finance. As a subsidiary to the Reserve Bank of India, the Industrial Development Bank of India took over the functions of the Refinance Corporation for Industry Ltd., from September 1964. It provides (a) refinance to a large number of financial institutions and (b) direct financial assistance to industrial concerns in the form of loans and advances, subscribing, purchasing or underwriting issues of stocks, shares, bonds or debentures, guaranteeing deferred payments due from industrial concerns to third parties and loans raised by them in the open market or from other financial institutions. In 1965-66, the Bank advanced Rs. 50 lakhs to the Digvijay Cement Company, Sikka.

Pilot Scheme—Prior to the integration of States in Saurashtra, the States of Rajkot, Bhavnagar, Palitana, Porbandar and Vadia had their own banks functioning as State departments and catering in their own way to the banking needs of the people. After integration these banks were amalgamated into the State Bank of Saurashtra by an ordinance promulgated in the year 1950. The State Bank of Saurashtra has become a subsidiary of the State Bank of India from May, 1960 under the State Bank of India (Subsidiary Banks) Act, 1959.

Besides commercial banking, the operations of the State Bank of Saurashtra were extended to providing financial assistance to small scale industrial units under the 'Pilot Scheme', first introduced in April, 1956 at certain selected centres and later extended over the entire country. Credit facilities are provided for the purchase of raw materials and stores including those in the process of production and the finance required for holding the products pending sale. In 1965 the State Bank of Saurashtra, sanctioned under this scheme Rs. 1,289,000 to 23 different types of small scale industrial units manufacturing steel goods such as buckets and tin containers, manufacture of cycle and spare parts, soap, stationery articles, concrete pipes, electrical articles, etc., in Jamnagar district.

Credit Guarantee Scheme—Lending institutions, particularly the banks, are reluctant to supply credit to small scale industries mainly due to the larger amount of risk involved therein. With a view to encourage them to advance more liberally to the small scale units. Government of India, in consultation with the Reserve Bank of India, formulated the 'Credit Guarantee Scheme' which came into force from July 1, 1960. It provides for sharing of losses between the Government of India and the lending institutions. The Reserve Bank of India is entrusted with the administration of the scheme as an agent of the Government of India. From March, 1967 the policy of granting advances under the scheme has been further liberalised and undertakings having investments in plant and machinery of value not exceeding Rs. 7.5 lakhs are eligible for assistance under this Scheme.

In 1965, the State Bank of Saurashtra secured a guarantee under the scheme in respect of 34 advances made in the district covering credit limits aggregating to Rs. 9.57 lakhs

CURRENCY AND COINAGE

The State mint of Nawanagar came into existence in the year 1570 A. D. (Samvat 1626) during the reign of Jam Satrasalji alias Jam Sataji, third in descent from Jam Raval, the founder of the dynasty. Muzaffar III was the Sultan of Gujarat at the time. The silver coins of the Jamnagar mint contained the name of Sultan Muzaffar in front and the Hijri year on the reverse. The silver coins were called *Jamsahi kori*. The word *kori* is said to be corruption of the word *Kunveri*, which designation is said to have been adopted to mark the relationship with the coin of the Sultan of Gujarat as one of bride and bridegroom. The *Jamsahi koris* were highly prized and were also accepted as legal tender even beyond the territories of Nawanagar State[1] and up to the borders of Ahmedabad.

Besides silver, gold currency was also issued for the first time in the State in 1863 but did not remain in circulation for long. The silver content of the kori currency seems to have varied at different times. 10 *vals* of silver and 2 *vals* of copper were used in minting the *kori* coins before 1861. Between 1861 and 1874 the silver content was nearly 6¼ to 7½ *vals* and in 1874 it did not exceed 6 *vals*. The exchange rate then prevalent between gold and silver *kori* is shown below.

1 Gold *kori*	=	32 Silver *koris*
3½ Silver *koris*	=	1 Rupee

Besides gold and silver koris, copper coins in circulation were termed *dhinglo, dhabu, dokado and trambio*. The conversion ratio between copper and silver coins was :

1 Silver *kori*	=	30 *dokadas* (copper)
1 Copper *dhinglo*	=	1½ Copper *dokadas*
1 Copper *dhabu*	=	3 Copper *dokadas*
1 Copper *dokada*	=	2 *trambias*

1. The *Jamsahi Kori* was also accepted at following places :
1. Junagadh, 2. Rajkot, 3 Sardhar, 4. Gondal, 5. Dhoraji, 6. Morvi, 7. Dhrol, 8. Sarapdad, 9 Wankaner, 10. Virpur Kharedi, 11 Jalia Dewani, 12. Satudad Vavdi. 13. Sisangchandli, 14. Mulia Deri, 15. Kotda Sangani, 16. Kotda Nagani, 17. Jetpur. 18. Malia, 19 Khakhrechi, 20. Gavridad, 21. Kotharia. 22. Pal, 23 Khisara 24. Shahpur. 25. Rajpura, 26. Bhadva, 27. Bagasara, 28. Bilkha 29 Vasavad, 30 Chital, 31. Mendarda, 32. Sarsai. 33. District of Junagadh, 34 District of Bhavnagar.

The circulation of these coins continued extensively till the year 1864-65. when, through the intervention of Agency, the scope of *kori* currency was greatly restricted. Still, however, the mint continued to function and was a source of income to the State up to 1895 A. D. when on the death of Jam Vibhaji and minority of his heir Jasaji, British adminisration was introduced in the State. After an existence of nearly 331 years the mint was finally closed in 1901 A. D. by the Administrator and the British India currency of rupees. annas and pies was introduced. 'Decimal Coinage' in terms of rupees and paise was introduced in this district along with the rest of the country in April 1957. For some time both the old and new coins remained in circulation, till the old coins were progressively withdrawn. The present coinage is issued in the denominations of 1, 2, 3, 5, 10, 25, and 50 paise. one rupee being equivalent to 100 paise. Currency notes are issued in the denominations of 1, 2, 5, 10, 100 and 1,000 rupees. The conversion ratio of the old and new coins is shown below.

Conversion Ratio of Old and New Coins

Old Coinage			Conversion ratio					
			Old		New*	Old		New*
3 pies	=	1 paise	1 pie	=	1 paisa	1 anna (12 pies)	=	6 paise
6 pies	=	½ anna, 2 paise	2 pies	=	1 paisa	2 annas	=	12 paise
12 pies	=	1 anna, 4 paise	3 pies	=	2 paise	3 annas	=	19 paise
4 *paise*	=	1 anna	4 pies	=	2 paise	4 annas	=	25 paise
8 *paise*	=	2 annas	5 pies	=	3 paise	5 annas	=	31 paise
12 *paise*	=	3 annas	6 pies	=	3 paise	6 annas	=	37 paise
16 *paise*	=	4 annas	7 pies	=	4 paise	7 annas	=	44 paise
32 *paise*	=	8 annas	8 pies	=	4 paise	8 annas	=	50 paise
64 *paise*	=	1 rupee	9 pies	=	5 paise	9 annas	=	56 paise
			10 pies	=	5 paise	10 annas	=	62 paise
			11 pies	=	6 paise	11 annas	=	69 paise
						12 annas	=	75 paise
						13 annas	=	81 paise
						14 annas	=	87 paise
						15 annas	=	94 paise
						16 annas	=	100 paise

* These were called 'naya paise' till June 1964 and came to be termed 'paise' thereafter

Trade and Commerce

In order to have a proper perspective of the condition of trade in Jamnagar district, it is necessary to have a clear idea of the position Nawanagar State formerly enjoyed in the maritime trade of Kathiawar. A review of the conditions prevalent in the past as compared to those existing at present will help appreciate the important position ports in Nawanagar State were able to secure in the trade of Kathiawar.

COURSE OF TRADE

The sea-borne trade of Kathiawar up to 1880 could be described as more or less profitable. After 1880, however, various factors led to its decline. The more enlightened States of Kathiawar could not neglect for long the natural advantages accruing to them from the expansion of the entrepot trade consequent upon the development of their ports which offered the added attraction of increasing customs revenue. Other things being equal distance was bound to be a favourable factor leading to the expansion of trade at Saurashtra ports which were natural sea inlets and outlets for Gujarat, Rajasthan and North-West India including Delhi. Many of them enjoyed an additional advantage in so far as they were directly connected through the metre gauge railway system, thus avoiding transhipment and the resultant loss of time and money. Added to their natural proximity to the hinterland Kathiawar States had the advantages of cheap labour, comparatively lower land rents, easy availability of open space, and absence of direct taxes to be paid in most of them.

The maritime States of Kathiawar enjoyed rights to levy, collect and retain the customs revenue from goods imported by sea at ports in their respective territories.

The *Statistical Account of Nawanagar*, compiled as far back as 1879 observes, "The ports of Nawanagar are not treated as British Indian ports. The principal export duties are those on grain, cotton, wool, horns and hides salt, peacock's feathers, etc., on which 13 annas per 10 maunds of 40 lbs. each is levied · while on wool Rupees 2-2-0 on 11 maunds of 40 lbs. each is levied ; on all other articles an *ad valorem* duty of four per cent is collected. The principal imports are cloth metal, silk, ghi sugar-stuffs, dyes, grains, timber, and groceries. The import duty on ghi is 13 annas per maund of 40 lbs. but with this exception a five per cent *ad valorem* duty is levied on all imports. Land customs export dues are not levied on any articles which may have paid sea customs, but is levied on grain grown in Nagar territory and thence exported. With the exception of grain, no other land export dues are levied Land imports dues are levied at a uniform *ad valorem* rate of 5 per cent, with the exception of ghi on which a duty of 13 annas per maund of 40 lbs. is levied. No export or import dues either of sea or land customs are levied on gold, silver, pearls, jewels, precious stones and cash. Coral alone is excepted from this freedom from taxation and is liable to the five per cent. *ad valorem* import dues."[1]

Viramgam customs Cordon Prior to the construction of rail routes and modern port development, levy of customs dues by Indian maritime States did not seriously affect the fiscal interests of the Government of India.

1. WATSON, J. W., *Statistical Account of Nawanagar*, pp 43-44, 1879

That Government was, however, conscious of the possibilities of future conflict. It, therefore, imposed in 1905 the Viramgam Customs Cordon whereby duties charged at British Indian ports were levied on all goods crossing Viramgam into British India. The Nawanagar State overhauled its Customs Department and revised the tariff so as to bring it in line with the Imperial Customs Tariff in 1916 i. e., before the Viramgam barrier was removed. This voluntary action of introducing customs rates not lower than those obtaining in British India on the part of the Nawanagar State facilitated the final solution of the ports' question.[1] Other maritime States of Kathiawar followed suit and agreed to levy at their ports customs duties not lower than those in force at ports in British India, with the result that the Viramgam Customs Cordon was withdrawn in 1917. The Government of India, however, made it abundantly clear that by virtue of their paramountcy they were free, when they so decided, to levy duties on all goods imported into British India, no matter what their source was. Thus after many years the Kathiawar ports were left free to develop their maritime trade in their own way. As a result, vigorous port development and growth of trade took place. Fearing the effects of these measures on Bombay ports, the Government of India reimposed the Customs Cordon at Viramgam in 1927. Inspite of these difficulties, trade at Nawanagar ports made a very satisfactory progress because of the natural advantages and also because of the various inducements and concessions given by the State. A Board of Trade was established by the Nawanagar State in 1936-37,[2] for fostering trade and developing comemrce and industries. In 1936 the Government of India entered into another agreement with the maritime States of Kathiawar by which the original agreements were radically revised. The States were allowed to retain the duties on goods crossing the frontier at Viramgam only up to prescribed limits on production of invoices and certificates issued by them. This seriously affected their import trade and resulted in the decline of their customs revenues.

On 15th August, 1947, the paramountcy of the British Crown over the Indian States lapsed and all the treaties and agreements between the Kathiawar States and the Government of India came to an end. By a Standstill Agreement between the rulers of Kathiawar and the Dominion of India, however, the old agreements relating to the customs continued. The existing state of affairs, however, did not accord with the new relationship between the States and the Central Government. The Viramgam Customs Cordon was, therefore, lifted by the Union Government in July, 1948, i. e. after the formation of Saurashtra State. It was simultaneously laid down that the Government of Saurashtra should agree to surrender all its customs rights and the administration of sea customs to the Government of India in lieu

1. *Nawanagar*, p. 51. 1907-1931
2. *Administration Report of Nawanagar State*, p. 99, 1936-37

of compensation payable to the Government of Saurashtra. But later with the coming into force of the Constitution in 1950, the right to levy customs duties and to manage major means of communications automatically passed over to the Centre.

Sea-borne Trade

Nawanagar State—The earliest statistics of trade available for the ports of Nawanagar for the years 1844, 1864, 1874, 1877 and 1878 are reproduced below. The chief commodities in trade were grains, *ghee*, cotton, raw wool, oil-seeds, cotton piece-goods, cotton seeds, dates, grocery and miscellaneous articles. The total trade which was worth Rs. 546,000 in 1844 A. D. had increased to Rs. 4,781,880 in 1878.

Imports--Exports, 1844-1878

Year		Imports	Exports
1844	..	912,795	233,205
1864	..	3,285,557	2,389,168
1874	..	1,920,437	4,247,054
1877	..	3,696,378	2,336,825
1878	..	4,352,472	429,408

The Statistical Account of Nawanagar while writing about the course of trade observes, "The trade of Nawanagar Ports has always been principally with Bombay and Karachi during the times for which there are any records; formerly the commerce was insignificant, and there was merely a coasting trade, which too, owing to the dread of Okha pirates was confined to but narrow limits."[1] Further on the writer observes, "The B. B. and C. I. Railway branch to Wadhwan has had no perceptible effect on the trade of Nawanagar ports. These ports export grain and cotton grown in the Nawanagar teritorry, and Nawanagar, except in years of scanty rainfall, is a grain producing country."[2] By 1880 Kathiawar trade had become more concentrated at the bigger ports, 88 per cent of the total sea-borne trade being concentrated in six out of 15. The total import trade of the region in 1880 was worth four crores of rupees. The principal imports consisted of rice, cloth, sugar, metal and timber and exports were cotton coal, grain, gold and silver.[3]

The trade of Nawanagar ports went on steadily progressing during the present century as a result of various measures taken by the former rulers for their development Large sums of money were spent for the improve-

1. WATSON, J. W., *Statistical Account of Nawanagar*, p. 12, 1879
2. *Ibid.*, p. 12
3. VAKIL and LAKDAWALA, *Economic Survey of Saurashtra*, p. 279, 1953

ment of Bedi which was developed as a modern port offering all facilities of berthing, transhipment, storage, etc. In the early years of this century, i. e., 1901-02 import trade was chiefly confined to cereals, sugar, jaggery, oils, coconuts, dates and spices. The export trade consisted of cotton, cereals, oil-seeds, wool, hides, *ghee* and bullion. Important changes took place in the import trade after World War-I in 1921-22 when articles like cloth, metal, sugarcandy, betelnuts, ivory, yarn, tobacco, sesamum, spices and coal entered the trade returns of Nawanagar State. But the articles exported remained unchanged. The trade became more diversified during World War-II by the addition of such articles of imports as matches, wine and spirits and cigarettes, but exports were confined to commodities like cotton, wool, cereals, ghee, castor and linseed, hides, spices and miscellaneous articles.

1901-02 to 1964-65—Between 1901-02 and 1927-28 the maritime trade of Nawanagar ports witnessed on the whole a steady growth. It increased in value from Rs. 42·57 lakhs in 1901-02 to Rs. 4·00 crores and over in 1927-28 but declined to Rs. 1·86 crores in 1932-33 on account of World depression. Improvement in trade is noticeable after 1933-34 and attained its pre-depression level in 1939-40, when it amounted in value to Rs. 4·83 crores. Decrease in trade during the Second World War is attributed to the embargo on trade with foreign countries like Japan and Belgium imposed by the Government of India.

Jamnagar District—Being a coastal district with intermediate ports like Bedi, Okha and Sikka and a number of minor ports such as Salaya, Jodiya, Dwarka (Rupen), Beyt, Pindara and Lamba, the trade in this region since medieval times is mostly sea-borne Being endowed with 9 ports out of a total of 46 intermediate and minor ports in the State, much of its trade is carried through these ports. For administrative convenience ports in the district are divided into (i) Bedi group and (ii) Okha group. Besides Bedi, the ports of Sikka, Salaya, Jodiya and Pindara are included in Bedi group of ports, while Okha group comprises Okha, Dwarka and Beyt, Lamba is placed in the administrative charge of Porbandar group of Ports Bedi group of ports included those of Nawanagar State, whereas the Okha, those of the Gaekwad. Their contribution to the trade of the district is reviewed below.

Maritime trade after integration was confined to cereals and pulses, wood and timber, mineral oils, metals, building and engineering goods, dates, tea and other miscellaneous articles. With the recurring years of scarcity and famine, imports of foodgrains have assumed greater importance after Independence. Establishment of new and expansion of existing industries have promoted exports of cement, salt, oil and chemicals, bauxite and vegetable oil. Recent years have witnessed further expansion in the structure of trade by including iron and steel, gunnies, cotton seeds, bitumen and coaltar, electrical goods and machinery, hardware, cotton, piece-goods, etc.

Overseas trade with the United Kingdom and other European countries, United States of America, Japan, U. S. S. R. countries, in the Persian Gulf, Ceylon and Pakistan covered lubricating and fuel oils, dates, electrical goods and machinery, cotton, tin-plates, iron and steel etc., in exchange for bauxite cement, chemicals, salt, groundnut oil, cake and seed, raw wool, onion and piece-goods exported from ports like Bedi, Okha, Sikka and Salaya.

Since integration trade figures available in items of tonnage of goods imported or exported serve as a proper criterion to assess the increase or decline in the volume of trade rather than in terms of value which do not form a correct basis of comparison owing to fluctuations in the value of rupee and its devaluation. The traffic returns for all the ports in the district reveal that there was a steady increase in trade from 179,657 tons in 1947-48 to 486,917 tons in 1957-58. It almost became two fold within a year and further rose to 999,134 tonnes in 1958-59 and to 1,474,598 tonnes in 1964-65. The percentage share of the district in the total maritime trade of Gujarat State shows that ports in Jamnagar district claimed 49·64 and 46·10 per cent respectively in 1963-64 and 1964-65.

Bedi—Situated on the south coast of the Gulf of Kutch, Bedi is a natural port on the seaboard of Western India and has had an enterprising and thriving commercial community trading far into the hinterland of India and across the seas. It was first mentioned as a port in the early part of the 18th century carrying on trade with ports in Kutch, Saurashtra peninsula. Portuguese territories, Gujarat, Bombay and Konkan, Karachi and ports in the Persian Gulf. On account of various measures taken by the Government for its improvement from time to time, Bedi has become one of the most important intermediate ports in the State.

The statistics available from the year 1933-34 reveal that from 84,389 tons in 1933-34, the volume of trade rose to 170,500 tons in 1938-39 but declined to 43,725 tons during World War-II in 1941-42. Trade began to revive, thereafter, and again stepped up to 169,802 tons in 1950-51. This upward trend was more or less maintained till 1963-64 when this port handled cargo to the extent of 508,480 tonnes valued at Rs. 189,213,325. The Bedi group of ports handled the highest tonnage being 16·17 per cent and 14·52 per cent respectively of the total traffic of the all the ports in the State during 1963-64. Another important feature is the preponderance of exports over imports, as revealed by the fact that in the year 1964-65 exports claimed about 94 per cent and imports only 6 per cent of the total trade at the port. Bedi is also important from the view point of the quantum of foreign trade handled by it in recent years. It shows that trade with foreign countries like the United Kingdom, other European countries, Japan, countries in the Persian Gulf and America has progressively increased till it reached 402,190 tonnes in 1964-65. Similarly it has helped the country earn valuable foreign

exchange, which likewise expanded to Rs. 14·95 crores that is to say 58 per cent of the total earned by all the ports of Gujarat in 1964-65. While imports from foreign countries have shown only a marginal rise from 7,104 tonnes to 8,505 tonnes during a period of four years from 1961-62, foreign exports have registered a steady rise from 264,712 tonnes to 393,685 tonnes during this period as a result of large exports of groundnut oil, seeds and cake, salt raw wool, etc.

Import trade was more or less steady between 1933-34 and 1940-41 and ranged between 45,538 tons to 59,605 tons, though it was of the order of 84,828 tons in 1934-35. The Second World War period witnessed almost a sharp decline to the extent of mere 2 tons in 1944-45. The post-war years saw a revival of trade which rose to 102,091 tons in 1947-48. The period between 1947-48 and 1960-61 is marked by occasional increases and decreases, and fell down to 27,620 tonnes in 1964-65. This decline in recent years is on account of stoppage of import of coal as well as increase of traffic at Navlakhi port in Rajkot district.

The principal articles of present day imports at Bedi port are dates, building materials, cotton seeds, oil-cakes, coconuts, iron and steel, fuel oil, kerosene, lubricating oil, petroleum, tea and timber. Of these imports of coconuts, dates, iron-scrap and lubricating oil were the maximum during 1963-64 and 1964-65. On account of liberalisation of imports, Bedi imported dates to the extent of 8,340 tonnes from the ports in Persian Gulf. Mineral oils were imported from foreign countries by oil companies like M/s Burmah Shell, Caltex, Indian Oil Company and the Esso Standard Incorporated.

From 38,851 tons in 1933-34, exports increased to 123,684 in 1938-39 but declined to 37,397 tons in 1942-43, i.e during the Second World War on account of restrictions placed by the Government of India on exports. Between 1943-44 and 1947-48 a fluctuating trend is visible. The period after 1948-49 is marked by a continuous rise in exports which rose from 108,394 tons in 1948-49 to 486,128 tonnes in 1963-64.

Chief articles of exports are bauxite, bone and bonemeal, groundnut oil in bulk, groundnut seeds, onion, raw wool, salt and castorseeds. Exports to foreign countries in 1964-65, were of the order of 393,685 tonnes or 81·08 per cent of total export trade of the port. 286,427 tonnes oilcakes being transported to Japan, United Kingdom and other European countries where bauxite was also sent. Japan also received 92,876 tonnes of salt which Bedi exported in 1964-65.

Okha— Okha the intermediate, all weather berthing port of Gujarat, is considered as a very important port of the State, open both to the foreign and inland traffic Situated on the western-most corner of peninsular Gujarat,

this port is endowed with a natural harbour providing shelter throughout the year. It is only 323 nautical miles away from Bombay, the major port on the west-coast of India. The port originally belonged to the Gaekwar of Baroda who developed it by providing it with a pier called Sayaji Pier where vessels of deep draught could be anchored. The port is connected with the rest of the country by a metre gauge line. There are large deposits of bauxite barely fifty miles away from the port. Cement and Chemicals factories famous as the Associated Cement Company and the Tata Chemicals are respectively located at Dwarka and Mithapur, situated at short distance from the port. Bauxite, soda ash, salt and cement are exported in large quantities from Okha port. Imports consist of mineral oils, building materials, coal and cake, chemicals, iron and steel, food-grains, etc.

From 17,981 tons in 1926-27 the total trade increased to 198,713 tons in 1935-36 and to 237,408 tons in 1939-40. The turbulent period of World War-II (1939-45) did not lead to much reduction in trade and the post-War years witnessed a steady increase. From 251,580 tons in 1946-47, the overall trade at the port progressively rose to 696,026 tonnes valued at Rs. 10·35 crores in 1964-65, when overseas trade accounted for 233,839 tonnes or 33 59 per cent. Foreign trade at Okha has declined in recent years from 319,184 tonnes in 1962-63 to 235,632 tonnes in 1964-65, when the foreign exchange earned fell from Rs. 73·93 lakhs to Rs. 24·84 lakhs. Imports, however, showed slight improvement from 111,473 tonnes to 161,151 tonnes on account of increased imports of mineral oils from countries in the Persian Gulf, Japan and other countries, whereas exports declined from 207,711 tonnes to 161,151 tonnes on account of reduction in exports of cement, chemicals, bauxite and salt. Okha had the reputation of handling maximum imports in the whole State in 1964-65.

From 61,307 tons in 1928-29 the imports rose to 107,712 tons in 1937-38 on account of sharp increase in the import of coal but declined to 36,770 in 1941-42 mainly due to War conditions. Trade began to revive from the subsequent year till it reached 432,710 tonnes valued at Rs. 6·29 crores in 1964-65. Of the total imports in 1964-65, those from foreign countries were to the extent of 161,151 tonnes Those of mineral oils were the largest and were brought in bulk from the U. S S. R. and ports in Persian Gulf, their destinations being factories at Dwarka and Mithapur and oil installations (oil storage barrels) at the port. Other important items were sulphur, tin plates, bitumen and coaltar, which jointly accounted for 7,444 tonnes.

Exports rose more or less continuously from 2,724 tons in 1927-28 to 447,411 tonnes in 1962-63, but declined in the subsequent years on account of reduction in the exports of cement, bauxite and chemicals. Exports to foreign countries amounted to 72,688 tonnes in 1964-65, of which bauxite was the largest and was transported to Japan, United Kingdom and other

European countries and Pakistan. Export of cement was mainly coastal except for 1,613 tonnes sent to ports in the Persian Gulf. The reduction in the export of cement in 1963-64 and 1964-65 appears to be due to increase in construction and development activities which necessitated larger consumption at home. Reduction in the export of chemicals by sea in recent years was due to their diversion by rail.

Sikka—Situated on the southern side of the Gulf of Kutch, Sikka is another intermediate port possessing a good natural harbour and a sheltered anchorage. A cement factory called the Digvijay Cement Co. Ltd. is located here. The chief articles of import are coal and coke, gypsum, gunnies and iron and steel, and exports cement, clinker and salt. The total trade at this port on the whole witnessed a steady growth from 30,958 tons in 1949-50 to 265,481 tonnes in 1964-65, the highest being 279,077 tonnes in 1963-64. From 925 tons in 1949-50, imports rose to 70,747 tonnes in 1964-65 and reached the maximum of 93,096 tonnes in 1962-63. Coke and coal imported at this port was the highest in the State in 1964-65. Exports rose from 30,083 tons in 1949-50 to 194,734 tonnes in 1964-65, the highest being 209,575 tonnes in 1963-64. Sikka witnessed maximum exports of clinker in the whole of the State in the last three years.

Other Ports—Jodiya, Salaya, Dwarka, Beyt, Pindara and Lamba are minor ports in the district. Of these only Salaya carried out both coastal and foreign trade and earned foreign exchange from the exports of salt, bauxite and onion which rose from Rs. 58,321 in 1962-63 to Rs. 669,830 in 1964-65. There has been no foreign trade at Jodiya after 1962-63. Important commodities that enter into the import and export trade of these minor ports are cement, wood and timber, building materials, salt, bauxite, onion, foodgrains and other miscellaneous articles. The trade handled by each of these ports is shown in Statement VI·8 and VI 9.

STATEMENT VI·8

Tonnages of Imports and Exports, 1933-34 to 1964-65

(Bedi and Okha Ports)

Year	Bedi		Okha	
	Imports	Exports	Imports	Exports
1	2	3	4	5
1933-34	45,539	38,851	76,520	106,007
1934-35	64,828	45,616	77,477	117,743
1935-36	40,286	62,993	93,496	105,217
1936-37	37,141	46,275	42,626	136,305
1937-38	32,221	75,357	107,712	124,476

STATEMENT VI·8—*contd.*

Year 1			Bedi Imports 2	Bedi Exports 3	Okha Imports 4	Okha Exports 5
1938-39	..	..	46,818	123,684	65,546	109,636
1939-40	..	..	59,605	72,440	84,455	152,953
1940-41	..	..	14,685	32,879	47,968	121,398
1941-42	..	..	11,927	31,798	36,770	202,350
1942-43	..	..	12,840	37,397	61,586	193,116
1943-44	..	..	227	67,227	64,950	144,168
1944-45	..	..	2	77,028	80,895	158,703
1945-46	..	..	12,789	59,519	79,614	125,936
1946-47	..	..	54,406	81,783	100,266	151,314
1947-48	..	..	102,091	77,566	165,941	218,907
1948-49	..	..	84,980	81,260	273,188	192,625
1949-50	..	..	62,051	108,394	158,109	148,426
1950-51	..	..	55,764	114,038	187,580	180,607
1951-52	..	..	71,705	142,751	283,667	204,975
1952-53	..	..	64,619	179,966	215,680	188,153
1953-54	..	..	40,590	256,317	229,213	191,130
1954-55	..	..	60,240	233,092	278,039	171,739
1955-56	..	..	55,562	293,610	230,122	196,824
1956-57	..	..	41,445	272,812	244,888	186,849
1957-58	..	..	46,204	249,413	230,478	210,063
1958-59*	..	..	36,495	325,253	155,985	223,232
1959-60	..	..	36,358	314,806	175,303	281,091
1960-61	..	..	33,601	312,344	206,814	375,709
1961-62	..	..	58,694	360,912	250,110	425,481
1962-63	..	..	29,902	430,069	379,310	447,411
1963-64	..	..	22,352	486,128	390,802	346,101
1964-65	..	..	27,620	436,436	432,710	263,316

NOTE:

Figures prior to 1933-34 are not available.
Figures from 1933-34 to 1957-58 are in tons.
* Figures from 1958-59 are in metric tonnes.

Source :

1. Port Officer, Bedi Group of Ports, Jamnagar
2. Port Officer, Okha Group of Ports, Okha

STATEMENT VI-9

Tonnages of Imports into and Exports from other Ports of Jamnagar District

Year	Sikka		Salaya		Jodiya	
	Imports	Exports	Imports	Exports	Imports	Exports
1	2	3	4	5	6	7
1953-54 ..	2,089	101,104	2,453	16,930	1,079	163
1954-55 ..	3,204	125,297	2,717	21,075	1,604	148
1955-56 ..	4,755	87,464	2,542	7,860	569	188
1956-57 ..	3,878	116,740	2,806	35,036	806	7
1957-58 ..	2,372	173,466	3,058	14,067	799	28
1958-59 (metric ton)	2,915	161,949	2,459	6,609	845	177
1959-60 ..	3,797	199,425	3,878	29,456	784	66
1960-61 ..	3,800	201,645	3,797	14,256	475	27
1961-62 ..	35,093	136,992	3,997	583	209	50
1962-63 ..	93,096	162,078	3,483	180	403	40
1963-64 ..	69,502	209,575	3,265	13,482	281	..
1964-65 ..	70,747	194,734	2,630	45,246	120	.

Year	Pindara		Dwarka (Rupen)		Beyt		Lamba	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
1	8	9	10	11	12	13	14	15
1953-54 .	..	..	1,013	7,194	85	264	221	..
1954-55 ..	..	..	1,929	10,204	50	50	164	..
1955-56 ..	..	..	1,022	9,034	181	20	101	..
1956-57 ..	..	923	965	11,877	109	30	166	..
1957-58 ..	..	460	8,093	14,305	141	193	128	..
1958-59 (metric ton)	1	787	1,084	7,591	186	44	..	.
1959-60 ..	..	..	2,331	5,549	229	46	117	..
1960-61 ..	..	35	1,225	7,380	330	134	112	.
1961-62 ..	..	313	1,056	4,960	382	120	202	.
1962-63 ..	..	548	1,171	5,421	281	6	202	..
1963-64 ..	..	..	722	1,006	295	11	7	35
1964-65 .	..	110	460	186	179	112	43	..

Source :

1. The Port Officer, Bedi Group of Ports, Jamnagar
2. The Port Officer, Okha Group of Ports, Okha

Trade by Rail—During the year 1963-64 the total tonnage of goods originating from the railway stations in Jamnagar district amounted to 1,067,529. Of these, Sikka which also is an important centre for the manufacture of cement by Shri Digvijay Cement Company Ltd., claimed the largest share 301,924 tonnes or 28·20 per cent. Okha followed with 202,942 tonnes or 19·10 per cent. It has large oil storage tanks where oil imported from foreign countries is stored for onward transmission to other centres. Dwarka, another important centre of cement manufacture, handled 129,089 tonnes or 12·92 per cent of this trade. Jamnagar, the largest industrial and commercial centre of the district, accounted for 100,426 tonnes. Bhatia and Bhopalka, with cotton ginning and oil mills and large deposits of Gypsum in their vicinity, handled 85,327 tonnes and 74,565 tonnes respectively. Mithapur an important centre for the manufacture of chemicals by the Tata Chemicals Ltd., transported 68,882 tonnes of chemicals such as salt and its bye-products, soda ash, caustic soda, alkalies, etc. The rest of the trade was handled by other stations in the district.

Trade Centres

Regulated Markets--Though Khambhalia and Kalavad have been declared as centres of regulated markets in the district, they have not started functioning yet.

Wholesale Trade Centres—Wholesale trade is usually concentrated in large urban areas or nearby port towns which facilitate direct import and export and thus avoid transhipment of goods and the resultant loss of time and money. Inland trade is carried through important trade centres like Jamnagar, the district headquarters, and other taluka centres like Khambhalia, Jodiya, Kalavad, Jamjodhpur, etc. Jamnagar being the assembling and distributing centre is the most important trading centre which caters to the needs of other centres in the district and outside.

Employment in Trade and Commerce--The 1961 Census shows that the workers engaged in trade and commerce in the district accounted for 17,437 persons (males 16,982; females 455), of whom 12,555 were from urban areas and the rest from the rural. The statistics further reveal that workers engaged in wholesale trade numbered 1,512 only, while retail trade claimed as many as 14,849 persons. Predominance of retail traders among those engaged in this economic activity is obvious. Even among retailers it is the categories relating to the essential basic needs of the people in the form of food and clothing which employ the largest number followed by trade in tobacco and tobacco products, like *bidi* and cigarettes. Trading and commercial activity being mostly an urban activity over 70 per cent live in urban areas, females being attracted the least to this branch of industry.

Jamnagar—Jamnagar, the erstwhile capital of Nawanagar State besides being the headquarters of the district of that name, is the principal town of the district. Famous as a trading centre of considerable importance, all the trade at Bedi port passes through Jamnagar. It is an important station on the metre gauge railway line running between Viramgam and Okha. It is the only centre in the district where transactions carried on by traders are of considerable magnitude. There were approximately 175 wholesale merchants in the city. It is the practice with merchants to store goods in private godowns for which rent at the rate of Re. 0·10 to 0·15 per bag per month is charged. Commission or dalali, quality allowance, weighing and octroi are the charges levied at the market.

Wheat, *bajri, jowar* and groundnut are the principal commodities in wholesale trade. The total turnover of these commodities which was 680,000 quintals valued at Rs. 4 crores and over in 1963-64 increased to 810,000 quintals or Rs. 6·00 crores in value during 1964-65. Transactions in groundnut were the maximum and amounted to 55·55 and 60·00 per cent respectively of the quantity and value of the total turnover in 1964-65. Besides cereals, pulses, sugar, cement, wood, garlic, coal, cotton, seeds and *gur* are other commodities of trade at Jamnagar.

Retail Trade—Retail trade is carried on by a large number of establishments located in the various towns and villages in the district which cater to the needs of their respective localities. Retail traders usually obtain their goods from local wholesalers. The stock in trade of the retailers in rural and semi-urban areas is generally limited and depends upon their financial condition and local demand. It is rapidly replenished as and when the stocks are sold out. Their counterparts in cities and towns, because of their sound financial position, are capable of keeping stocks in large quantities. Goods are obtained on credit from the wholesale dealers and bills are settled during the specified time limit, whereafter interest is charged on the amount of credit provided. The brisk season for trade is generally from October to June as July to September which are monsoon months are comparatively dull, when celebration of social occasions like marriage is generally avoided. Shops selling *pan, bidi,* tobacco, etc., generally carry on normal business throughout the year. Transactions in retail trade particularly reach maximum during such festivals as Diwali and marriage season. Retail sales are usually on cash basis but where customers are well acquainted with the traders, running accounts are opened and settled periodically.

According to the data furnished by the 1961 Census, 19,849 persons were engaged in retail trade in the district. Of these 10,229 or 69·00 per cent were from the urban areas and the rest from the rural. Retail trading in cereals, pulses, fruits, sugar, spices, oil, fish, dairy products and food-stuffs

like sweetmeat, condiments, cakes, biscuits, etc., occupied a predominant place employing 8,116 persons or 54·85 per cent followed by trading in fibres, yarns, dhoti, sarees, ready-made garments, etc., 1,555. Retail trading in goods unspecified engaged 1,541. The next important group which engaged 1,343 persons was trade in tobacco, *bidi*, cigarettes and other tobacco products as against 1,076 workers employed in trade and commerce miscellaneous. Retail trading in other household equipments engaged 552 workers, while banking and similar type of financial operations engaged 440 workers. The rest of the groups engaged less than 400 workers each and were, therefore, of lesser importance. The Census data further show that out of 14,849 workers engaged in retail trade, 4,070 or 27·41 per cent were employers, 2,260 or 15·22 per cent employees, 4,758 or 32·05 per cent single workers and 3,761 or 25·32 per cent family workers.

Retail trade is generally distributed in the following groups : (1) grocery shops which stock and sell such items as cereals, pulses, spices, *gur*, groundnut and sesamum, oil, *ghee*, tea, coffee, condiments, dry fruits, baking soda, menthol crystals, saffron, catechu, *agarbatti*, etc., (ii) *pan-bidi* and tobacco shops, which are generally one-man establishments, sell *pan* (betal leaves) *bidi*, cigarettes, cigars, chewing tobacco, betelnuts, catechu, menthol crystals, wax candles, match boxes and aerated waters ; (iii) cloth and hosiery shops deal in all kinds of textiles, cotton, woollen, silk, nylon and other finer varieties of textiles like terylene, orlon, etc., having a wide range of clothing in shirtings, coatings, sarees, dhoties, *malmal*, *chhint*, voiles and hosiery articles of all types, etc., (iv) fuel and charcoal shops sell fire-wood and charcoal ; (v) stationery and cutlery shops, (vi) fruits and vegetables shops, (vii) utensils shops selling household utensils of brass, copper, aluminium, German Silver and stainless steel ; (viii) hardware and building materials, (ix) chemist shops, (x) sweetmeat and *farsan* shops and (xi) leather goods and footwear.

Retail Marketing Centres--All taluka headquarters are the retail marketing centres for the surrounding villages. Khambhalia, Bhanvad, Dwarka, Jamjodhpur, Dhrol, Kalavad and Jodiya in this district are retail marketing centres. Excepting Kalavad which is linked only by road, others are linked with Jamnagar either through metre gauge rail route or roads. Jamnagar being the assembling and distributing centre for the whole district also acts as an important retail marketing centre as well and caters to the needs of smaller retail centres in the district. Foodgrains being the most important items of trade, their transactions during 1963-64 and 1964-65 are shown below in Statement VI.10.

STATEMENT VI·10

Transactions at Retail Marketing Centres

Sl. No. 1	Centre 2		Wheat Quantity 3	Wheat Value Rs. 4	Bajri Quantity 5	Bajri Value Rs. 6
1	Khambhalia	1963-64	3,200	201,600	3,860	196,860
		1964-65	6,800	489,600	4,250	276,250
2	Bhanvad	1963-64	..	..	2,250	119,250
		1964-65	..	..	3,350	217,750
3	Dwarka	1963-64	..	..	2,250	117,000
		1964-65	..	..	7,800	507,000
4	Jamjodhpur	1963-64	..	..	4,500	234,000
		1964-65	..	..	3,800	266,000
5	Dhrol	1963-64	4,280	222,560	2,250	111,250
		1964-65	4,500	292,500	2,100	136,500
6	Kalavad	1963-64	6,450	341,850	8,470	406,560
		1964-65	7,250	471,250	6,200	396,300
7	Jodiya	1963-64	4,450	244,750	1,750	78,750
		1964-65	3,250	195,000	2,250	135,000
	Total	**1963-64**	**18,380**	**1,010,760**	**25,330**	**1,263,670**
		1964-65	**21,800**	**1,448,350**	**29,750**	**1,935,300**

Sl. No. 1	Centre 2		Jowar Quantity 7	Jowar Value Rs. 8	Groundnut Quantity 9	Groundnut Value Rs. 10
1	Khambhalia	1963-64	1,850	77,700	54,750	3,558,750
		1964-65	7,350	382,200	115,750	8,102,500
2	Bhanvad	1963-64	7,300	299,300	8,460	532,980
		1964-65	8,250	429,600	15,250	1,128,500
3	Dwarka	1963-64	6,350	241,300	..	..
		1964-65	5,480	284,960	2,400	168,000
4	Jamjodhpur	1963-64	2,950	123,750	12,500	837,500
		1964-65	2,200	121,000	15,600	1,248,000
5	Dhrol	1963-64	5,600	224,000	2,650	164,300
		1964-65	6,850	342,500	5,500	385,000
6	Kalavad	1963-64	3,880	166,840	11,650	757,250
		1964-65	2,850	148,200	13,500	945,000
7	Jodiya	1963-64	2,150	88,150	2,480	176,080
		1964-65	2,550	127,500	3,850	269,500
	Total	**1963-64**	**30,080**	**1,221,040**	**92,490**	**6,026,860**
		1964-65	**35,530**	**1,835,960**	**171,850**	**12,946,500**

Source :

District Registrar, Co-operative Societies, Jamnagar

Sales Tax Statistics—Sales Tax statistics are useful also in having an idea of the volume of business transacted in different commodities. Though a number of shops the turnover of which did not reach the minimum prescribed for registration under the Sales Tax Act are outside the scope of the statement that follows, such as they are, the statistics give a fair indication of turnover in different commodities.

STATEMENT VI·11

Registered Dealers and their Turnover, 1964-65

(FIGURES OF GROSS TURNOVER IN THOUSAND OF RUPEES)

Food-stuffs and hotels		Clothing and consumer goods		Building materials		Transport and vehicles goods		Machinery and capital goods	
No. of registered dealers	Gross turnover	No. of registered dealers	Gross turnover	No. of registered dealers	Gross turnover	No. of registered dealers	Gross turnover	No. of registered dealers	Gross turnover
1	2	3	4	5	6	7	8	9	10
1,084	351,137	154	20,833	76	7,586	14	159	110	13,517

Fuel and power		Industrial Commodities		Miscellaneous		Total of all Commodities	
No. of registered dealers	Gross turnover	No. of registered dealers	Gross turnover	No. of registered dealers	Gross turnover	No. of registered dealers	Gross turnover
11	12	13	14	15	16	17	18
51	8,177	267	106,537	1,059	206,359	2,815	714,305

Source :

Sales Tax Officer, Jamnagar

There were 2,815 registered dealers in the district in 1964-65 and their turnover amounted to Rs. 714,305,000. Dealers in food-stuffs and hotels had the largest number of registered dealers and also the largest turnover amounting to Rs. 351,137,000 or 49·16 per cent of the total during 1964-65. Those in miscellaneous group followed with a turnover of Rs. 206,359,000 or 28·89 per cent. Industrial commodities and clothing and consumer goods also claim a fair share by accounting for Rs. 106,537,000 and Rs. 20,833,000 respectively.

The Gujarat State Warehousing Corporation—As a result of the bifurcation of the Bombay State Warehousing Corporation, the Gujarat State Warehousing Corporation was set up in the month of December 1960 to provide (i) facilities of scientific storage for agricultural produce, (ii) easy credit to the producers and (iii) prevention of distress sale by the

producers in the State. The actual working of the Corporation was, however, started from February, 1961. Its paid-up share capital consists of Rs. 20 lakhs, contributed equally by the State Government and the Central Warehousing Corporation. It purchases land and constructs godowns. Though the Corporation has not constructed its own godowns in Jamnagar district, facility of warehousing is provided by it at Jamjodhpur since January, 1964 by hiring private godowns. Other places to which this facility is extended are Jamvali, Bhanvad, Vansjalia and Moti-Paneli in the district.

FAIR PRICE SHOPS

On account of the exigencies of the Second World War, there was an abnormal rise in the price of essential commodities like cereals and pulses, cloth, kerosene, etc. Nawanagar State, therefore, adopted measures for the control of essential commodities by opening fair price shops for their distribution to the public on the basis of ration cards issued for the purpose. All control measures then introduced were done away with in 1954. But the spiral of rising prices which started thereafter continues even today. Fair price shops have been opened by the Government of Gujarat for selling essential commodities at reasonable rates and keep the prices in check. These shops are located at convenient places in the district for facility of general public. Foodgrains are distributed on family ration cards which are registered with fair price shops authorised by Government. The number of fair price shops in the district which was 250 in the year 1962-63 increased to 421 in 1964-65. These shops distribute wheat, rice, *jowar*, *bajri*, sugar, *gur* and groundnut oil. Sales of wheat which were 52,019 quintals in 1962-63 rose to 342,412 quintals in 1964-65. Those of sugar from 25,445 quintals in 1962-63 to 76,518 quintals in 1964-65 ; and of *gur* from 32,932 quintals to 90,645. Rice sold in these shops increased from 32,809 quintals to 48,061 quintals during the same period. These figures amply demonstrate the popularity of these shops in the country covering larger and larger sections of people. The impact of fair price shops is visible in the effective check of prices of essential commodities which are kept under control by making them available at rates lower than those ruling the open market.

Fairs—Fairs which are generally associated with important deities and religious festivals attract people from all social classes and afford ample opportunities for social, cultural and religious contacts. Their economic significance lay in the past in the opportunities they offered for the display and sale of a large number of articles brought to these fairs. Though fairs enjoy considerable popularity even today, their economic importance in modern times is on the decline owing to the availability of commodities of daily needs in the village or town itself. Quick mode of transport, spread

of education, decreasing influence of religion and alternative means of recreation and entertainment have made fairs less popular and attractive than before.

Articles such as sweets, *farsan*, toys, tea, coffee, cold-drinks and aerated waters, cutlery, milk, vegetables, fruits, *pan-bidi*, cigarettes, clothes and ready-made garments are brought and sold at the fairs. The former utility and economic importance of the fairs, when trading was brisk and considerable, have almost vanished as people do not stand in the need of making purchases at the fairs as they used to do in the past for the simple reason that most of the articles are nowadays available in the village itself or can be purchased during their frequent visits to the urban areas. Activities significant from the point of view of trade are exhibitions organised at important fairs for displaying agricultural products, livestock and products of cottage industry. Cultural activities include *ras*, *garbas*, *bhajans*, sports competitions and religious preachings.

The Janmashtami fair at Jamnagar and Dwarka and the Ramdev Pir fair at Vodisang are the most important fairs in the district from the point of view of congregation and the number of days for which they last. A brief description of these fairs is given below.

Janmashtami Fair, Jamnagar—The Janmashtami fair held near the temple of Shitla Mata, believed to be constructed during the reigns of Jam Jasa and Jam Lakha in about 1610 A. D., starts from Shravan Vad 7 and continues for the next two days. There also is a shrine of Vidyavasini Mata, the tutelary goddess of the Jethvas. The site being spacious and picturesque is particularly suitable for large congregations. About a lakh of people attend the fair. Jamnagar being a cosmopolitan city, besides Hindus constituting a little over 50 per cent, members of other communities such as Muslims, Christians, Sikhs and Parsis also participate. The Jamnagar Borough Municipality which organises the fair looks after the sanitary arrangements. Special buses are also run to enable people residing in distant localities to visit the fair.

The fair covers the entire open place on the river bank stretching from beneath the Victoria Bridge over the river Nagmati to the causeway of the Vohra Hajira and thence onward on the other side of the river up to the temples of Shitla Mata and Nagnath Mahadev. Beside the wide banks of the river, the river itself and the knolls covered with big trees beyond the temples provide ample scope for recreation.

About 200 stalls selling toys of various kinds earthen, wooden, plastic, rubber as also tin, brass and iron wares, cutlery, hosiery, perfumery and articles of food and drink are erected here. Besides tea shops, show-rooms,

advertisement booths, pavement photographers, etc., merry-go-grounds, giant wheels, circus, magic shows, gymnastic displays, and spheres of death provide recreation and entertainment to the visitors. Beyond the open grounds and temples of Shitla Mata and Nagnath Mahadev are mounds covered with big trees. These are favourite picnic spots for the visitors many of whom buy some eatables in the fair and come here to enjoy them in the pleasent surroundings. Boating in the river is also a very popular item of recreation. Another such item is swinging from the big trees and people of the local *Bhoi* community swing high upon it. *Ras mandlis* from nearby villages are invited on the occasion to perform *ras* or folk-dance, which is a speciality of Saurashtra.

Janmashtami Fair, Dwarka— Dwarka is one of the most important and renowned pilgrim centre for the Hindus. It is said that Lord Krishna, an incarnation of Vishnu, selected Dwarka as a safe place in the extreme west of Saurashtra peninsula and established his home and capital there in order to find a permanent homeland for the Yadavas of Mathura, who were constantly attacked and harassed by king Jarasandha of Magadha. Being one of the four principal holy places and one of the seven sacred ancient towns of India, thousands of pilgrims and scholars on historical tours visit this place from all over the country. A shrine of Shri Krishna, the principal deity of the place, is housed in an imposing and beautifully carved temple constructed on the bank of the Gomti creek.

Janmashtami is celebrated at Dwarka on Shravan Vad 8 (August) to commemorate the birth of Lord Krishna in Mathura. It is celebrated with great pomp and fanfare and rows of lights are lighted at night. Devotees sing *bhajans*, listen to the exposition of *Bhagwatgita* and remain at the temple till midnight to have *darshan* of the God. Exactly at the appointed hour the birth of Shri Krishna is announced by the *pujari* amidst the sound of conch-shells and cymbals. The All India Radio, Rajkot, gives a special broadcast describing the event. About 17,000 persons participate in the Janmashtami fair.

Ramdev Pir Fair, Vodisang—The fair is held here for three days from Bhadrapad Sud 9 to 11 in commemoration of the saint Ramdev Pir, the legendary hero of Marwad. The origin of the fair is very recent and is organised since Bhadrapad Sud 11 V. S. 2014 (1958 A. D.). A temple is dedicated to him at Vodisang, a small village in Kalavad taluka, 16 miles away from Jam-Vanthali, a station on the Viramgam-Okha metre gauge section of the Western Railway with which it is also connected by bus services. Ramdev Pir is very popular among lower caste Hindus, especially in northern and central Gujarat, Saurashtra and Kutch. He is also known Ramdev, Ramaiya or Rama Pir. Being a Rajput chief he is represented as a bearded warrior riding a horse and holding an arrow or a spear in hand.

As the story goes, the father of Ramdev Pir, Ajmalji, was a devout worshipper of Lord Krishna who made several trips between Banaras and Dwarka carrying water of the holy Ganges for the worship of Dwarkadhish. The God at last appeared in person and assured him that he would be incarnated as his son. A son was accordingly born to Minalde, wife of Ajmalji, on Vaisakh Sud 2 and was named Viramdev. When he was six months old, the God manifested himself in the family and was renamed Ramdev. He performed many miracles including that of killing a demon called Bhairav, restoring to life a Bania killed by robbers and curing Netalde the decrepit daughter of a Sodha Parmar of all her bodily defects and marrying her. He was also known as Raja of Ranuja as the step-well built by his father at his bidding contained sweet-water. He took *samadhi* on Bhadrapad Sud 10.

Another legend associated with the installation of the image of Ramdev Pir at Vodisang is that of a Rabari named Hira Bhagat of Vodisang. When the latter was at Pokangadh, he had a dream in which Ramdev Pir promised that he would go to Vodisang if his image was installed in that village. This being done on Bhadrapad Vad 11 of V. S. 2014, Vodisang came to be known as new Ranuja, as distinguished from the original in Marwad. The fair thus marks the anniversary of the establishment of the temple. Each year a new flag replaces the old one on Bhadrapad Sud 9, i. e., a day preceeding the death anniversary of Ramdev Pir. Offerings at the shrine are distributed among the devotees as *prasad.*

The fair is held in the open space, wherein about 40,000 people participate, a majority of whom come from fifteen villages nearby. It is organised by Bhagat Hira Karsan and the leading persons of Vodisang. Fifty shops of sweetmeats, thirty of toys and thirty tea stalls are opened at the fair. Recreation consists of merry-go-rounds, dramas and *krishna lila,* and *ras mandlis* from outside the village sing *bhajans* and folk songs. The health centre at Kalavad chlorinates drinking water.

Co-operation in Wholesale and Retail Trade—As a result of development of co-operative activity, a number of consumer stores have been opened in the district to supply to the consumers such articles as sugar, cloth (cotton, silk and woollen), stationery, hosiery, perfumery, toilets, controlled food-grains, dry fruits, etc., at fair and reasonable prices. The Jamnagar *Jilla Sahkari Kharid Vechan Sangh* Ltd. at Jamnagar is recognised as the central consumers' co-operative store. There are sixty four primary consumers' co-operative stores, of which 44 are located in Jamnagar city alone and the remaining in other urban areas of the district. Out of 44 stores in Jamnagar city, 16 are affiliated to the Jamnagar *Jilla Sahkari Kharid Vechan Sangh*, Ltd. The following figures illustrate the progress of consumers' co-operatives in the district.

Particulars	Jamnagar Central Consumer's Co-operative Store Ltd., Jamnagar		Primary Consumer's Co-operative Stores	
	1963-64	1964-65	1963-64	1964-65
1	2	3	4	5
Membership	66	151	1,775	2,422
Share capital (Rs.) ..	67,750	82,650	44,770	93,730
Working capital (Rs.) ..	477,585	1,062,609	76,260	171,437
Sale of consumers' goods (Rs.)	4,918,698	6,292,815	228,316	467,165

Source :

District Registrar, Co-operative Societies, Jamnagar

TRADE ASSOCIATIONS

Trade and commerce being one of the principal economic activities of modern times, associations and organisations of manufacturers and merchants have come into existence to safeguard the interests of trade and industry. Recognising their importance, Central and State Governments nominate their representatives on the various committees and sub-committees so that they can express their views in matters affecting the mercantile community. The growth of trade associations in this district is, however, comparatively recent. The Nawanagar Chamber of Commerce, Jamnagar, is the principal organisation to which the following associations are affiliated. Out of 15 listed below 12 are formed in Jamnagar, 2 at Khambhalia and 1 at Mithapur as seen from the following statement.

Associations in Different Branches of Trade and Industry, Jamnagar District

Industry	Trade and commerce	Miscellaneous
1 The Saurashtra Oil Mills Association, Jamnagar	1 The Sugar Merchants' Association, Jamnagar	1 The Clearing Agents and Freight Brokers' Association, Jamnagar
2 The Kutch Saurashtra Salt Manufacturers' Association, Jamnagar	2 The Salt Merchants' Association, Jamnagar	
3 The Jamnagar Factory Owners' Association, Jamnagar	3 The Iron and Hardware Merchants' Association, Jamnagar	
4 The Soap Manufacturers' Association, Jamnagar	4 The Wool Merchants' Association, Jamnagar	
	5 The Cutlery Merchants' Association, Jamnagar	
	6 Piecegoods Merchants' Association, Jamnagar	
	7 The Grain Merchants' Association, Mithapur	
	8 The Saurashtra Dates Merchants' Association, Jamnagar	
	9 The Grain Merchants' Association, Khambhalia	
	10 The Pure Ghee Merchants' Association, Khambhalia	

The aims and objects of these associations are: (1) look after the interests of trade and commerce of the region and to help create harmonious relations among members, (2) to arbitrate whenever possible in trade disputes and to study legislation affecting trade and commerce and industry and to present its views to Government in this regard, (3) to collect and disseminate important statistics relating to industry, trade and commerce and general economic activities in the country and to publish and circulate important journals and other literature connected with trade and commerce and allied activities.

Nawanagar Chamber of Commerce, Jamnagar—The Nawanagar Chamber of Commerce, Jamnagar, is by far the most important merchant association in the district. It was formed in 1933 during the reign of Jam Ranjitsinhji by amalgamating (1) The Jamnagar Sugar Merchants' Association, (2) The Jamnagar Piece-goods Merchants' Association and (3) The Jamnagar General Merchants' Association. The idea of establishing a chamber of commerce occurred to late Jam Ranjitsinhji, who soon after his return from the United Kingdom in 1932, convened a conference of leading businessmen in Jamnagar and an association called the Jamnagar Chamber of Commerce now styled the Nawanagar Chamber was formed. Within three decades of its existence the membership of the Chamber rose from 102 to 300.

Prior to 1947, the area of operation of the Chamber was confined to Jamnagar city alone and was then known as the Jamnagar Chamber of Commerce. However, after Independence, it was revitalised and reorganised. Its nomenclature was changed to the present one. The activities of the Chamber were expanded by the inclusion of other branches of trade and industry such as iron, hardware, motor spare parts, petrol, steamship agencies, trade in gold and silver, banks, etc. Since its inception the Chamber has evinced a keen interest in safeguarding the interests of the trading community as also in the development of trade and industry. Even in the initial stages, the Chamber successfully pleaded for bringing down the rates of cesses and taxes prevalent in the State on different commodities. It also made laudable efforts for the expansion of port facilities and development of import-export trade at the Bedi port and submitted a memorandum to the West Coast Major Port Development Committee pointing out the importance of Bedi and how further expansion would lead to increase in the quantum of its trade. On account of expansion of salt industry in Saurashtra, the Chamber feared that if its bye-products are not developed it would result in the loss of market for salt. The Chamber, therefore, pleaded with Government for providing necessary facilities to the manufacturers of salt to undertake production of soda ash and other bye-products. Difficulties of procuring adequate wagons was also discussed by the Chamber from time to time with the Railway authorities. It also played a notable part in solving the problem of banking facilities faced by merchants in Jamnagar by convening a joint conference of merchants and those in the field of banking in Jamnagar.

The Chamber is represented on a number of committees of Government, important among them are : (1) State Ports' Advisory Committee, Ahmedabad, (2) Sales Tax Advisory Committee, Ahmedabad, (3) Customs Advisory Committee, Jamnagar, (4) Central Warehouse Advisory Committee, Jamnagar, (5) Zonal Railway Advisory Committee, Bombay and (6) Divisional Railway Users' Consultative Committee, Rajkot. It publishes a weekly bulletin giving useful information relating to trade and industry of Jamnagar.

Saurashtra Dates Merchants' Association, Jamnagar—The Saurashtra Dates Merchants' Association, Jamnagar, was established in the year 1960 to (1) improve conditions of importers of dates throughout the State, (2) achieve harmonious relations among the members, (3) study Government legislation affecting trade and put up views of the association to Government thereon, (4) collect useful information regarding trade and circulate it among its members, (5) arbitrate in cases of disputes among members and (6) convene general meetings of the members to consider ways and means of furthering the cause of trade. The Association has a membership of 15 and is affiliated to the Nawanagar Chamber of Commerce, Jamnagar.

The Grain Merchants' Association, Khambhalia—The Grain Merchants' Association, Khambhalia, was established in April, 1964 to look after the interests of grain trade of Khambhalia, particularly of merchants having limited resources. This association formerly worked jointly with the Grain, Seeds and *Kirana* Merchants' Association, Khambhalia, but since April, 1964 it is working independently to help remove difficulties experienced by merchants. It has a membership of 75 and is affiliated to the Nawanagar Chamber of Commerce, Jamnagar.

Other associations mentioned at the outset have similar aims and objects, viz., to look after the interests of their respective members and to seek effective solution of problems affecting the business carried by them.

WEIGHTS AND MEASURES

The *Statistical Account of Nawanagar*[1] describes the weights and measures used in the territory now included in the Jamnagar district in the following terms.

> " The principal weights and measures in use in the Nawanagar State are as under. They are briefly measures of weight and measures of content. The principal measures of weights are (1) ordinary weight and (2) goldsmiths' weights.

1. WATSON, J. W., *Statistical Account of Nawanagar*. p. 17, 1879

Measures of weight :

(i) Ordinary Weight

22 Imperial rupees	= 1 *Sir*
50 *Sirs*	= 1 *Man* or *maund*
20 *Mans*	= 1 *Khandi*

(ii) Goldsmith's Weight

16 *Wals*	= 1 *Gadhiana*
2 *Gadhianas*	= 1 *Tola*

In weighing grain produce, the *man* consists of 40 *Sirs*.

Measures of Content :

(iii) 2 *Adhalas*	= 1 *Pawala*
2 *Tokadias*	= 1 *Pali*
5½ *Palis*	= 1 *Chothia*
2 *Chothias*	= 1 *Ardhia*
2 *Ardhias*	= 1 *Map*
20 *Maps*	= *Kalsi*

(iv) Milk Measure

1¼ *Sirs*	= ¼ *Kalsio*
5 *Sirs*	= 1 *Kalsio*

The weights below a Pali in this mode of measurement correspond to the grain measures."

This account shows that there was very little difference, except in the local names of the denominations of weights and measures used in those days in the Saurashtra peninsula. This position continued in the district even after Independence and the merger of the State in 1948 in the unified State of Saurashtra. After the formation in 1956 of the bigger bilingual State of Bombay wherein the areas now comprising the Saurashtra region and Kutch were integrated, the Bombay Weights and Measures Act of 1958 was introduced to bring uniformity in the different types of weights and measures in vogue in different parts of the State.

Variation in weights and measures used in the various parts of the Indian Union affected the smooth flow of both internal and external trade

owing to the difficulties of conversion of different units. While the major part of the world had long evolved a much simplified system of weights and measures, there was no uniformity in the system followed in the country *vis-a-vis* foreign countries. This created certain complications in trade dealings with other parts of the country and the world. Government of India, therefore, decided to adopt the Decimal System known as the " Metric System of Weights and Measures" and introduce it throughout the country on a uniform pattern whereby the difficulties encountered in calculation and conversion were eliminated. By this system, the weight measures, the linear measures and the capacity measures were reduced to a multiple of ten. In Gujarat, the use of metric measures has been made compulsory from April 1962 and its implementation has been entrusted to the State Directorate of Industries.

The salient features of the scheme are mentioned below :

1 Length is measured in metres instead of in yards,

1 metre = 1·09 yards

2. Distance is measured in kilometres instead of in miles,

1 km. = 0·62 miles

3 Weight is measured into kilograms instead of in pound (lb.) or *seer*, 1 kg. = 2.2 lbs. or 1.07 *seer*, and quintal instead of a maund,

1 quintal = 5.38 mds.

4. Area of the land is now measured in hectares instead of in acres,

1 hectare = 2 47 acres

5. Tola weights have been replaced by grams.

1 gram which is one thousandth part of a kilogram is equal to 0.086 tolas.

6. Unit for valuable stones in carat,

1 carat which is one-fifth of the gram equals 0.017 tolas.

STATEMENT VI.5

Operations of Agricultural/Non-Agricultural Credit Societies 1960-61 to 1964-65

Year	No. of Societies	No. of members	Paid-up share capital Rs.	Working capital Rs.	Loan advanced Rs.	Overdues Rs.	Deposits Rs.	Reserve and other funds Rs.
1	2	3	4	5	6	7	8	
A—Agricultural Credit Societies								
1960-61	297	31,881	2,876,232	9,072,783	5,096,000	1,441,483	73,856	335,696
1961-62	300	31,160	3,361,295	11,296,637	6,505,792	3,261,477	62,018	401,767
1962-63	313	32,877	4,010,470	14,443,614	7,730,978	4,104.295	106,775	516,029
1963-64	321	38,515	4,614,170	18,027,844	6,202,000	6,973,000	138,000	564,000
1964-65	334	42,146	5,165,200	17,773,400	7,344,800	4,463,400	245,700	726,500
B—Non-Agricultural Credit Societies								
1960-61	40	12,333	394,380	1,889,476	762,827	423,000	815,876	93,129
1961-62	40	12,412	428,579	2,032,106	1,109,505	509,885	344,653	96,453
1962-63	41	12,750	479,650	2,137,770	1,240,007	464,277	1,015,380	92,879
1963-64	38	12,783	542,000	2,229,000	1,270,000	470,000	1,023,000	164,009
1964-65	39	13,545	528,965	2,300,583	1,240,819	206,739	1,037,352	126,819

Source :
District Registrar Co-operative Societies, Jamnagar

CHAPTER VII

COMMUNICATIONS

OLD-TIME TRADE ROUTES

Some idea about the old time trade route and modes of conveyance in the district can be had from the *Kathiawar Gazetteer*, compiled as far back as 1884. Much of the early trade and traffic of the district was carried on by means of water communication and the rest by means of laden bullocks, horses, camels, and hired labourers. Whatever roads existed were unsafe and difficult to traverse and were trafficable only in fair season. The following extract from the *Kathiawar Gazetteer* describes in following terms the condition of roads in the peninsula of which Jamnagar district formed part.

> "Upto 1865 there were no made roads in the province. During the rainy season (June-October) when the ports were closed and the rivers flooded, outside dealings were at a standstill and there was little movement within the province. Tracks of wheeled vehicles usually ran along the gravelly beds of small streams as the soil was there hardest and the friction least, but at the best of times, the passage of the larger streams was a grievous hindrance. In fair weather it was, and in parts it still is, no uncommon sight to see a train of laden carts halted at the bank of river, and cattle of three or four carts formed into a team to drag one across; or when the cart was by itself taken across empty, and filled on the opposite bank, the load being carried over bit by bit on men's head."[1]

Describing the trade routes it observes, "In old times, the chief trade routes in the province followed the coast from Gogha south-west to Somnath and thence north-west to Dwarka. The chief land routes were those joining the peninsula with the mainland. Of these the most frequented passed by Jhinjhuwada and Patdi to Wadhwan and by Viramgam to Wadhwan. The routes by Dholka and Dhandhuka to Wadhwan and Valabhi were also in common use. There seems also to have been a road joining Valabhi with Junagadh and Vanthali. But as most of this road passed through forest and thinly peopled country, the trade route followed the coast line. In Muhammadan times, especially under the imperial viceroys (1573-1700), the interior of the peninsula became populous, routes increased, and a road was opened from Wadhwan direct to Dwarka by Nawanagar and Khambhalia. Before the Rajkot-Wadhwan road was made, the old route from Rajkot to Wadhwan passed by Sanosara, Ghiawad,

1. CAMPBELL, J. M., *Gazetteer of the Bombay Presidency*, Vol. VIII *Kathiawar*, 1884, p. 220

Mahika, Than, Umarda and Muli; and before the extension of railway to Wadhwan, the road from Wadhwan to Ahmedabad passed by Talsana, Shapur, Sanand and Sarkhej. The old trade route from Nawanagar to Gujarat and Malva was by Dhrol, Tankara, Morvi, Halvad, Dhrangadhra and Viramgam."

ROADS

Prior to 1865, made roads did not exist in the peninsula. The period 1865 to 1880 is important in the history of road construction in Kathiawar, when nearly 892 km. of roads were constructed. Of these 531 km. were bridged and metalled roads, while 361 km. were gravelled roads. A road nearly 84 km. in length connecting Jamnagar with Rajkot was also constructed during this period. The road policies of different States were co-ordinated through the British Political Agent at Rajkot. To prevent the deterioration of the already existing roads constructed at a large cost, a special fund, to which all the first and second class States agreed to subscribe, was created by the Political Agent. Public Works Departments were opened in many States of peninsula. By 1876, the Nawanagar State also started a separate Engineering Department. But the condition of village roads and approaches continued to be far from satisfactory. Though road building was considered an administrative necessity as well as a public convenience, its progress was comparatively slow till the First World War on account of the fact that a number of States which had invested very large amounts in the construction of railways regarded roads as a rival transport system affecting their railway revenues. Moreover inter-State jealousy and competition did not permit of a cohesive or ordinated plan of communications. The total road mileage in Nawanagar State by 1929-30 was 214 miles or 345 km. The importance of good roads was being increasingly realised by then and greater attention was being paid to the construction of new roads and repairs to old ones. As a result, the total road mileage in Halar district at the time of its formation in 1948 rose to 453 miles or 729 km. of which nearly 105 km. had black topped surface.

After integration, the Government of Saurashtra paid adequate attention towards the construction and development of roads in the region and large amounts of money were earmarked for the purpose in the successive developmental plans. The road mileage increased very rapidly from nearly 736 km. in 1950-51 to nearly 1,385 km. in 1966. Even then it fell short of the Nagpur Plan target by nearly 262 km. out of a total of 1,647 km. fixed for the district in the said Plan. A target for constructing a total of 3,141 km. of roads has, therefore, been set for the district in the 20 year Road Development Plan (1961-81) to remove this deficiency and shortfall.

Classification of Roads--The present classification of roads is based up on the resolution of the Indian Road Congress passed at its Nagpur session

in 1943. It broadly classifies roads into two types, (1) main roads consisting of National Highways, State Highways and Major District Roads passing throughout the length and breadth of the country, and (2) other roads consisting of other district roads and village roads.

National Highways (N. H.) have been defined as main highways serving predominently national, as distinct from State purposes, running through the length and breadth of India, which together from a system connecting by routes as direct as practicable major ports, foreign highways, capitals of States, and also include those of strategic importance required for the defence of the country. National Highways are maintained by the State Public Works Department from Central Government funds. These are generally tar roads with a minimum width of 38 feet or 11·58 metres.

State Highways (S. H.) have been defined as all other main, trunk or arterial roads of a State connecting with National Highways, or State Highways of adjacent States, district headquarters and important cities within the State and serving as main arteries of traffic to and from district roads. These roads are maintained by the Public Works Department. They have a tar surface and a minimum width of 32 feet or 9·75 metres and are completely motorable throughout the year, except at those places having causeways or submersible bridges where traffic may be interrupted in monsoon for very short periods. The State Highways are usually connected with National Highways.

Major District Roads (M. D. R.) are roughly of the same specifications as State Highways with this difference that their minimum width is 24 feet. They connect important marketing centres with railways, State Highways and National Highways. There are 'Other District Roads' (O. D. R.) also which are of the same type as Major District Roads except that they are subject to more interruptions of traffic during the rainy season. Village roads are generally unmetalled approach roads from main roads to villages. Major District Roads, Other District Roads and village roads in the district are maintained by the District Panchayat.

Length of Roads in the District, 1966

Sl. No.	Type of roads	Road length, as on 31st March, 1966 (in km.)
1	2	3
1	National Highways	..
2	State Highways	315.20
3	Major District Roads	466.98
4	Other District Roads	453.55
5	Village Roads	148.96
	Total	1,384.71

Source :

1. Executive Engineer, P. W. D., Jamnagar
2. Executive Engineer, Panchayat Division, Jamnagar

National Highways— No National Highway passes through this district.

State Highways—The State Highways passing through this district are (1) Rajkot-Jamnagar-Khambhalia-Dwarka-Okha Road and (2) Jamnagar-Porbandar Road.

Rajkot-Jamnagar-Khambhalia-Dwarka-Okha State Highway—This road starts from Rajkot and enters Jamnagar at km. No. 34. While passing through the district it touches on its way Dhrol (50 km.), Jamnagar (90 km.), Khambhalia (150 km.), Dwarka (235 km.) and Okha (265 km.). Important Major District Roads which either take off from or are crossed by this road are (i) Dhrol-Jodiya, (ii) Jamnagar-Bedi port, (iii) sikka bifurcation road and (iv) Khambhalia-Salaya road.

The important bridges crossed by this road are located on the rivers Bavni (50 km.), Und (55 km.), Kankavati (63 km.), Ghee (150 km.) and the Victoria bridge on Nagmati and Rangmati rivers (88 km.). The total length of this road in the district is 231 km., of which 40 km. have a cement concrete surface, 162 km. are black topped and 29 km. water bound macadam surface.

The road has great economic significance from the view point of passanger and goods traffic. It connects the industrial towns of Dwarka and Mithapur where the Associated Cement Companies (Dwarka Cement Works) and the Tata Chemicals Ltd. are respectively situated and also serves Okha, one of the most important intermediate ports in the State carrying on profitable inland and foreign trade.

Jamnagar-Porbandar Road—This is another State Highway in the district. It links Jamnagar with Porbandar, an important intermediate port and a trade centre of Junagadh district and passes through Jamnagar, Lalpur and Bhanvad talukas. Important Major District Roads which either take off from this road or are crossed by it are Jamnagar-Samana-Dhrafa-Jamjodhpur road and Bhanvad-Jamjodhpur road. The important causeways crossed by the road are on the rivers Dhandhal (40 km.) and Veradi (72 km.). The total length of this road is 131 km. of which 85·73 km. are within the revenue limits of this district, and the rest in Junagadh district. The entire length of the road in this district is black topped.

Major District Roads

Jamnagar-Samana-Dhrafa-Jamjodhpur Road—The road starts from Jamnagar and traverses over the Jamnagar-Porbandar Highway for the first 4 km. and then bifurcates near village Kansumara. It passes through Dharivav, Dadia, Sagar Dam site near Naranpar, Gagav, Pipartoda,

Panchsara, Khatia, Samana, Vadala, Dhrafa, Ambardi and Jamjodhpur. It is a fair weather road and has a total length of 67·20 km. of which 47·60 km. are water bound macadam and the rest unmetalled.

Jamjodhpur Bhanvad and Bhanvad-Pachhtar-Nagaka Road—From Jamjodhpur runs another Major District Road up to Bhanvad covering a distance of 26·60 km. with a black topped surface, motorable in fair weather. Bhanvad is also linked with Bhanvad-Pachhtar-Nagaka major district road which runs in south-west direction up to village Nagaka in Porbandar taluka covering a distance of 17·60 km. in this district. This road has an unmetalled surface and hence motorable only in fair weather.

Jamnagar-Kalavad Road—This is a section of the Jamnagar-Kalavad-Rajkot-Road. It passes through hilly region and is the only means of communication between Jamnagar and Kalavad. It has, for this reason, a heavy traffic. The road touches in its stretch villages Theba, Vijarkhi. Durpat, Modpar, Matli (Moti), Khandera and Haripar. Despite metalled surface the road becames impassable in the monsoon on account of floods in the rivers Mathalia, Takodi and Gargadio which cross the road at km. No. 12·4, 17·9 and 22·1 respectively. The total length of the road is 46·40 km. (black topped surface in 20·80 km. and water bound macadam surface in 25·60 km.) From Kalavad the road runs further up to Rajkot covering a distance of 22·40 km. up to the village Anandpur in the district and enters Rajkot district.

In addition, two other Major District Roads joining Kalavad with Kandorna (Rajkot district) and with Jamvanthali also emanate from Kalavad. The former covers a distance of 25·60 km. of water bound macadam surface, and the latter 22·40 km. of unmetalled surface in the district.

Khambhalia-Bhadthar-Advana Road—This fair weather road starts from Khambhalia, a taluka headquarters, situated on the Rajkot-Jamnagar-Dwarka-Okha State Highway and passes through Vijaypur, Keshod, Sherdi, Bhadthar and Khirasara. The road terminates at Advana, a village in Porbandar taluka where it meets Raval-Advana Major District Road. The length of the road in this district is 33·39 km. and has a water bound macadam surface.

Khambhalia-Bhanvad Road—The road emanates from Khambhalia and bifurcates from Khambhalia-Advana Road at km. No. 5. Out of a total length of 30·40 km. this road has been constructed up to 13·60 km., i.e., up to Fot a village in Khambhalia taluka.

Jodiya-Amran Morvi Road—This inter-district road starts from Jodiya, the mahal headquarters and runs up to Amran. It crosses the boundary of

the district near village Jivapar to enter Rajkot district and terminates at Morvi. Out of a total length of 51·20 km. in this district the road has black topped surface over 8 km. and water bound macadam surface on the remaining portion. This is a fair weather road.

Dhrol-Jodiya Road—This road starts from Dhrol, which is on the Rajkot-Jamnagar-Okha State Highway, meets Jodiya-Amran Road at km. 12·80 (from Dhrol) near village Bhadra, 8 km. from Jodiya. Between Dhrol and Bhadra, the road has a black topped surface motorable all round the year.

The following statement describes the rest of the major district roads in the district.

Sl. No.	Name of the road	Total length (in km.)	Surface	Remarks
1	2	3	4	5
1	Bhatia-Kalyanpur ..	.. 31.40	Water bound macadam	Fair weather
2	Jodiya-Hadiyana ..	.. 16.00	"	"
3	Dhrol-Latipar ..	.. 14.40	Murrum	..
4	Raval-Advana ..	.. 11.08	Black-topped	All weather
5	Dhrafa-Valasan ..	.. 9.60	Water bound macadam	"
6	Jamnagar-Rozi ..	.. 8.00	Black topped	"
7	Gingni-Sidasar ..	.. 6.40	Water bound macadam	"
8	Road connecting Sikka with Rajkot-Jamnagar Okha S. H...	5.60	Black topped	"
9	Dwarka outside town road ..	4.80	Black topped	"
10	Jamjodhpur-Gingni ..	4.80	Water bound macadam	"

Details of other district roads and village roads in the district as on 31st March, 1966 are shown in Appendix I and II of this Chapter.

Municipal Roads—The Jamnagar Borough Municipality is the only municipality in the district. The total length of roads under its charge in 1966 was 135·80 km., of which 110·08 km. had an asphalt surface and the remaining were tar roads.

Vehicles and Conveyances—The bullock cart was the main means of transport before the mechanisation of the mode of conveyance. Despite the extension of railways and expansion of bus traffic for passanger and goods traffic which now pass through the length and breadth of the district, the bullock cart still retains much of its former importance and usefulness in the village economy which is primarily agricultural. This is clearly evident from the Livestock Census of 1961 which has returned 44,535 bullock carts in the district, the highest number being found in Khambhalia taluka and the lowest in Okhamandal.

Bullock Carts (Livestock Census, 1961)

Sl. No.	Taluka	No. of bullock carts	Sl. No.	Taluka	No. of bullock carts
1	2	3	1	2	3
1	Jamnagar	6,072	6	Kalyanpur	5,985
2	Okhamandal ..	1,833	7	Bhanvad	3,534
3	Jodiya	4,143	8	Jamjodhpur	6,001
4	Khambhalia ..	6,480	9	Lalpur	4,275
5	Kalavad	4,117	10	Dhrol	2,095
				Total	44,535

Source :

Collector, Jamnagar District

Other Vehicles—Other vehicles in the district are bicycles, motors, taxis, buses, public carriers, auto-rickshaws, horse drawn carriages, carts drawn by camels, etc. As in other districts, use of bicycles in this district is on the increase.

The following statement shows the approximate number of vehicles registered in the district during the year 1967-68.

Category	No.	Category	No.
Motor cycles	851	Jeep cars	48
Motor cars	726	Tractors	116
Taxis	40	Passenger buses ..	67
Auto-rickshaws ..	370	Ambulance cars ..	4
Public and private carriers	796	Trailers	85
		Total	3,123

Source :

Regional Transport Officer, Rajkot

Vehicles are classified into transport and non-transport series. In respect of the former series which coveres public and private carriers, auto-rickshaws and State Transport buses, the owner has to fill in form 'E' as laid down in the Bombay Motor Vehicles Act, 1939, produce a voucher of sale together with form 'F' duly filled in by the dealer and certificate of insurance from the insurance company. On receipt of the above documents the Inspector of Motor Vehicles inspects the vehicle, registers it and issues the necessary certificate under section 38 of the Act if found mechanically fit. There is only a slight

variation in respect of registration of non-transport vehicles, i. e., motor cars, motor cycles, etc.,. wherein the dealer is not required to fill in form 'F' under the Act. The registration fee charged differs with different vehicles. Motor cycles are charged Rs. 10, light motor cars Rs. 20 and all other vehicles Rs. 40. Taxes on vehicles are fixed according to their weight. A motor car which weights approximately 1,500 kg. is charged Rs. 150 per annum.

Beasts of Burden—The following statement shows the various types of beasts of burden and their strength in the district, according to Livestock Census, 1961.

Sl. No.	Category	No.
1	Bullocks	149,360
2	Horses and ponies	8,069
3	Mules	17
4	Donkeys	8,471
5	Camels	1,556
	Total	**167,473**

Source :

Bureau of Economics and Statistics, *Handbook of Basic Statistics*, pp. 236-39, 1963 and 1964

Besides bullocks, donkeys have still retained their usefulness as beasts of burden for earth work and metal work in the construction of dams, roads and buildings.

ROAD TRANSPORT

Road communication prior to the integration of Kathiawar States into the Union of Saurashtra did not present a co-ordinated picture owing to the rivalry of railways owned and operated by different States. Those which had invested large amounts of capital in the construction of railways regarded roads as a rival transport system affecting their revenue. Construction of roads was generally neglected and on the whole discouraged. This factor together with the conflicting interests of different States came in the way of the development of roads in the peninsula.

Transport by bus managed by private bodies on contract or auction basis made for huge profits to the operators. In the absence of uniform rules for the passing of public vehicles, unhealthy competition, overcrowding and disregard for the safety of passengers were the main drawbacks of the system. To put an end to these evils an Act similar to the Motor Vehicles Act and

rules in force in Bombay State, were passed by the Saurashtra Government and a Regional Office with Headquarters at Rajkot was created. Realising the need for nationalisation of road transport in Saurashtra, the Government of Saurashtra set-up in 1956 statutory autonomous body known as the Saurashtra State Road Transport Corporation, and placed in its charge the transport system of that region. This body retained its separate identity even after the integration of Saurashtra State into the bilingual Bombay State in 1956. After its bifurcation and with the formation of the State of Gujarat in 1960, the Saurashtra State Road Transport Corporation and Kutch State Road Transport Corporation were amalgamated to form the Gujarat State Road Transport Corporation from May of that year. The Corporation has three divisions in Saurashtra one each at Rajkot, Junagadh and Bhavnagar.

The programme of nationalisation was accelerated in 1956-57 and 1957-58. As a result, major portion of road transport was taken over by the State by 1964. At the end of 1965 only two private companies, viz., (i) Nawanagar Transport and Industries Private Ltd., and (ii) Jamnagar Transport Union Private Ltd. operated bus services in the district. The former operated the following routes : (i) Jamnagar Railway Station-Bedi Port, (ii) Jamnagar-Bhanvad, (iii) Jamnagar-Jamjodhpur, and (iv) Jamnagar-Porbandar. The routes operated by the latter were (i) Jamnagar-Porbandar via Verad, (ii) Jamnagar-Kutiyana, (iii) Jamnagar-Jamjodhpur via Balva, (iv) Jamnagar-Lalpur, (v) Jamnagar-Bhanvad via Verad, (vi) Jamnagar-Jamjodhpur via Samana-Dhrafa, (vii) Jamnagar-Navagam via Samana, (viii) Jamnagar-Chattar, (ix) Jamnagar-Bhalsan, (x) Jamnagar-Bavla, and (xi) Samana-Paneli.

Jamnagar district Depot, which is attached to the Rajkot division of the Corporation, started functioning from 1st October, 1962. Besides the depot at Jamnagar, there are five control points in the district at Dhrol and Kalavad, under Rajkot division and Khambhalia, Dwarka and Bhatia under Junagadh division

Routes and Operation—The Corporation fixes the routes and frequency of trips according to the availability of vehicles and convenience of the public. Some of the routes operated in fair weather are altered or suspended during the rainy season when the monsoon time-table comes into operation. At present Jamnagar district is served by nearly 120 routes linking it with remote villages which were cut off in the past. Jamnagar is connected with Ahmedabad, the State capital, as also with other district headquarters in Saurashtra. According to the survey conducted by the State Bureau of Economics and Statistics in 1963, 237 villages in the district, out of a total of 673, had a local bus stand; 123 had it within a distance of a mile, 114 within 1 to 2 miles, 148 within 2 to 5 miles, and 51 had to travel more than 5 miles to catch a bus.

On 30th April, 1966, 48 scheduled trips were in operation. Extra trip were also undertaken to cope with increase in traffic in marriage season. The number of passengers travelled on an average amounted to 8,246 per day per single trip in the month of April, 1966 which speaks for the popularity of the State Transport bus services plying throughout the entire length and breadth of the Saurashtra peninsula and beyond.

City Bus Service, Jamnagar—Jamnagar Borough Municipality runs its own bus service since 20th October, 1963. In 1966, the municipality had a fleet of 20 vehicles plying in the city as well as in areas within a radius of five miles from the city of Jamnagar. The bus service is operated on nine different routes connecting important places within and outside the municipal limits. Its runs up to Bedi port, aerodrome and also extends to the Government of India Naval establishment at Valsura (Rozi). The average number of passengers carried per day was 23,000 in 1966.

RAILWAYS

History—Construction of railways in the area comprising the Saurashtra region largely depended on the interests and initiative taken by the former Princely States in the peninsula. These States were unwilling to allow private enterprise to construct a railway line passing through their respective territories as in that case they would have no control over it. They did not favour the construction of railway lines also by the Government of India, because of the fear that it may be guided primarily by the consideration of welfare of British Indian territory. The only alternative, therefore, was to construct railways by the States themselves. This was rather difficult because the number of States in the peninsula was so large that in the absence of some unified control and management, working of railways in Saurashtra would prove uneconomical and costly. A beginning in this direction was, however, made with the construction of a railway line from Bhavnagar to Wadhwan (in 1880) by the former Bhavnagar State and from Dhola to Dhoraji (in 1881) jointly by Bhavnagar and Gondal States. Inspired by this initiative, other States also followed suit and took up construction of railways within their territories. The result was the extension of Dhola-Dhoraji line which was opened for traffic in 1881 up to Porbandar in 1890. By this extension certain places in Jamnagar district, especially those in Jamjodhpur taluka were served by rail communications. The Nawanagar State entered this field in 1897 by construction a railway line connecting Bedi port and its capital Jamnagar city with Rajkot, the political headquarters of the British. No further progress seems to have been made in this direction till 1919 when Sir Vithaldas Thakersey of Bombay formed a company known as Jamnagar-Dwarka Railway Company and with the help of Nawanagar and Baroda States constructed a railway line from Jamnagar to Kuranga. While this construction was in

progress, the Baroda State also constructed a line onwards from Kuranga to Okha port. Shortly after the construction of this line, three separate Railways, viz., Jamnagar Railway owned by the Nawanagar State, Jamnagar-Dwarka Railway owned by the Jamnagar-Dwarka Railway Company and the Gaekwar's Okhamandal Railway which were then in operation came together under a coalition agreement for their joint working from 1923. The Nawanagar State purchased the Jamnagar-Dwarka Railway from the Jamnagar-Dwarka Railway Company in 1936. After integration, the Jamnagar-Dwarka Railways were taken over by the Saurashtra Government with effect from 1st April, 1948 and operated as part of Saurashtra railway. On account of the merger of Baroda State with the Bombay State in 1949 the Okhamandal Railway was taken over by the Government of India from 1st August, 1949. As a result of federal financial integration in April, 1950, the Saurashtra Railways also came to vest in the Government of India. On the formation of the Western Zone from 5th November, 1951, the Saurashtra Railways lost their separate identity and were merged with the Western Railway. The chart given below depicts the stages of development of rail communications in Jamnagar district.

History of Raiways in Jamnagar District

Sl. No.	Name of the section	Date of opening
1	2	3
1	Dhola Jetalsar-Porbandar (only from Kotda-Bavishi to Sakhpur)	Dhola-Dhoraji line extended up to Porbandar in 1890 passed through this district
2	Viramgam-Surendranagar Rajkot-Jamnagar-Okha opened in following stages:	
	(a) Rajkot to Jamnagar (the portion between Hadmatia Jn. and Jamnagar lies in this district) ..	8-4-1897
	(b) Jamnagar to Khambhalia ..	1-4-1922
	(c) Khambhalia to Kuranga ..	1-9-1922
	(d) Kuranga to Okha	16-11-1922
3	Jamnagar to Bedi	8-4-1897
4	Khambhalia-Salaya	19-1-1937
5	Hadmatia-Jodiya	3-10-1940
6	Kanalus-Sikka	1-4-1947
7	Kanalus-Katkola	16 12-1956

Excepting Kanalus-Katkola railway line, all other lines in the district were constructed before Independence, i. e., during the regime of princely States. Besides being a great boon to the development of trade and

communications, the railways contributed substantial financial benefit to the Nawanagar State as will be evident from the following figures.

Railway Earnings

Year	Revenue receipts Rs.	Revenue expenditure Rs.	Net earnings Rs.
1	2	3	4
	A—Jamnagar Railway		
1908-09	232,859	111,500	..
1912-13	251,577	149,403	102,174
1919-20	515,237	237,545	277,692
1925-26	697,920	404,835	293,085
1928-29	1,030,832	613,421	426,491
1934-35	825,798	437,158	388,640
1939-40	849,478	467,359	382,119
1942-43	1,565,755	590,897	974,858
	B—Jamnagar-Dwarka Railway		
1928-29	416,132	260,861	155,271
1934-35	344,332	191,202	153,130
1939-40	402,854	245,705	157,149
1942-43	893,737	364,009	529,728

Source:

Administration Reports of Nawanagar State

The total length of railway lines in the district all of which is in metre gauge is 398 km. This works out to 3·84 km. of railways per 100 sq. km. of area and 48 km. of railways per one lakh of population. Almost all the talukas in the district, with the exception of Kalavad, are served by railways. The details of railway stations are given in the following statement.

STATEMENT VII-1

Railway Stations, Jamnagar District

Taluka

Bhanvad	Dhrol	Jamjodhpur	Jamnagar	Jodiya
1	2	3	4	5
1 Katkola	1 Dhrol	1 Gop	1 Jamnagar	1 Jodiya
2 Verad	2 Jaiva	2 Gop-Mota	2 Hapa	2 Bhadra
3 Bhanvad	3 Jalia-Dewani	3 Sakhpur	3 Aliabada	
4 Kalavad		4 Tarsai	4 Jam-Vanthli	
		5 Balva	5 Lakhabaval	
		6 Vansjalia	6 Bedi	
		7 Jamjodhpur	7 Sikka	
		8 Kotda-Bavisi		

STATEMENT VII.1—*contd.*

Taluka

Kalavad 6	Kalyanpur 7	Khambhalia 8	Lalpur 9	Okhamandal 10
..	1 Bhopalka	1 Khambhalia	1 Pipli	1 Okha Port
..	2 Bhatia	2 Viramdad	2 Kanalus	2 Arambhda
		3 Sinhan	3 Modpar	3 Mithapur
		4 Bhatel	4 Dabasang	4 Varvala
		5 Salaya	5 Lalpur	5 Dwarka
			6 Sanosri	6 Baradia
			7 Motikhavdi	7 Gorinja
				8 Kuranga
				9 Okhamadhi

Source :

Bureau of Economics and Statistics, *District Statistical Abstract*, Jamnagar 1961-62, pp. 142-43

The details of various rail routes in the district are as under :

(1) *Dhola-Jetalsar-Porbandar*—The importance of this line lies in the fact that it runs through the heart of the Saurashtra peninsula and passes through as many as five districts, viz., Bhavnagar, Amreli, Rajkot, Jamnagar and Junagadh and helps movement of goods and passengers. It is a metre gauge line covering a total distance of 256 km. Starting from Dhola junction, a railway station on the Bhavnagar-Surendranagar section it enters Jamnagar district near Kotda-Bavishi (Jamjodhpur taluka) at 193 km. and runs up to Sakhpur and then passes through Junagadh district to Porbandar via Ranavav.

(2) *Viramgam-Surendranagar-Rajkot-Jamnagar-Okha*—This metre gauge line which covers a distance of about 428 km. from Viramgam to Okha enters the district at 225 km. near railway station Jalia Dewani of Dhrol taluka. It is one of the most important railway lines in the peninsula traversing in east-west direction. It connects the district with Viramgam, an important railway junction in the State, which has rail-links with other parts of the country. The line also feeds the pilgrim traffic to Dwarka, a famous place of Hindu pilgrimage. In its course the line passes through Jamnagar, Lalpur, Khambhalia, Kalyanpur, and Okhamandal talukas of this district.

(3) *Jamnagar-Bedi*—This branch covers a distance of 7 km. of metre gauge from Jamnagar and terminates at Bedi, one of the important intermediate ports in the State carrying on brisk inland and foreign trade which is greatly facilitated by the construction of this line.

(4) *Khambhalia-Salaya*—It starts from Khambhalia, a junction station on the Viramgam-Okha main line, and terminates at Salaya, a port in Khambhalia taluka. Its total length is 13 km. with no other railway station in between.

(5) *Hadmatia-Jodiya*—This section covers a distance of 38 km. starts from Hadmatia in Rajkot district and terminates at Jodiya port. It enters Jamnagar district at km. number 11 near Jaiva station in Dhrol taluka. The line caters to the goods traffic of Jodiya port.

(6) *Kanalus-Sikka*—This is a branch line which starts from Kanalus, a junction station on the Viramgam-Okha main line, and terminates at Sikka, an intermediate port in the district, open both to foreign and inland trade. Besides serving the port traffic, it also serves a big cement factory situated at Sikka. The total length of this line is 15 km.

(7) *Kanalus-Katkola*—This branch covers a total of about 67 km. It starts from Kanalus, a junction station on the Viramgam-Okha main line, and terminates at Katkola, which is also a junction station on Dhola-Jetalsar-Porbandar metre gauge line. This section thus functions as a connecting link between the two main lines, viz., Viramgam-Okha and Dhola-Jetalsar-Porbandar. In its course from east to west the line passes through Lalpur, Jamjodhpur and Bhanvad talukas. Excluding Kanalus, 9 other stations served by it are Dabasang, Lalpur, Sanosari, Gop, Gop Mota, Verad, Bhanvad, Kalavad and Katkola.

Important railway stations in this district are Jamnagar, Dwarka, Mithapur and Okha.

Okha—It is one of the most developed intermediate ports of the State, which carries on a flourishing trade, both import and export, and has storage godowns at the port erected by various petroleum companies. Ferry service plies from this port for the facility of pilgrims visiting the holy island of Beyt. Exports consist of bauxite chemicals, salt and cement and imports mineral oils, gypsum and building materials.

Mithapur—Mithapur is an important station where the Tata Chemicals Limited is situated. Soda ash and other chemicals manufactured in this factory are exported from Okha port.

Dwarka--Famous as a sacred place of pilrimage for the Hindus, it is an important centre of cement manufacture established by the Associated Cement Companies (Dwarka Cement Works).

Jamnagar--Jamnagar, the capital of the former Nawanagar State, is now the headquarters of the district of that name. It is an important industrial

city where oil mills, solvent extraction plant, a woollen mill, tiles and pottery works and a number of small industries are situated.

Passenger and Goods Traffic—The statement below gives figures about number of passengers booked and the tonnage of goods handled at each station in the district during 1963-64.

STATEMENT VII.2

Passenger and Goods Traffic, 1963-64

Sl. No.	Section	Station	No. of passengers booked at each station	Approximate tonnage of goods booked at each station
1	2	3	4	5
1	Viramgam-Surendranagar Rajkot-Jamnagar-Okha	Jalia-Dewani	19,416	..
		Jam-Vanthali	73,959	39
		Aliabada	110.239	614
		Hapa	7,255	19,420
		Jamnagar	803,965	100,426
		Lakhabaval	55,555	36
		Pipli	39,119	13
		Kanalus	94,028	2,227
		Modpur	55.572	69
		Sinhan	18,684	..
		Khambhalia	206.948	9,858
		Viramdad	1,334	..
		Bhatel	41,322	258
		Bhopalka	40,923	74,565
		Bhatia	87,331	85,327
		Kuranga	12,083	8,399
		Okhamadhi	11.301	5,598
		Gorinja	10,704	2
		Baradia	16,046	..
		Dwarka	252,671	129,089
		Varvala	26.648	567
		Mithapur	156,226	68,882
		Armada	3,485	..
		Okha	127,500	203,763
2	Jamnagar-Bedi ..	Bedi	468	40,010
3	Khambhalia-Salaya ..	Salaya	41.985	15,423
4	Hadmatia Jodiya ..	Jalia	3,145	16
		Dhrol	12.842	903
		Bhadra	4,450	230
		Gunatitnagar	3.046	..
		Jodiya	16,397	671
5	Kanalus-Sikka ..	Moti-Kavadi	10,885	..
		Sikka	32,219	301,024
6	Dhola-Jetalsar-Porbandar ..	Kotda-Bavishi	6,418	Not open for goods
		Jam-Jodhpur	158 920	7.861
		Balva	112,675	2,372
		Katkola Jn.	165,538	1,634
		Wansjalia	70,470	3,282
		Sakhpur	70,945	134

STATEMENT VII.2—*contd.*

Sl. No.	Section	Station	No. of passengers booked at each station	Approximate tonnage of goods booked at each station
1	2	3	4	5
7	Kanalus-Katkola ..	Dabasang	12,298	Not open for goods
		Lalpur	24,974	865
		Sanosari	3,549	595
		Gop	10,907	213,256
		Gop Mota	4,615	Not open for goods
		Verad	8,009	75
		Bhanvad	25,494	2,270
		Kalawad Mota	2,884	Not open for goods

Source :

Chief Public Relations Officer, Western Railway, Bombay

Rail-road Competition—The Economic Survey of Saurashtra published in 1953 significantly observes that when railways faced severe competition of traffic from motors all over India after World War I many State Railways reading the signs of the times started their own motor services. Jam Ranjitsinhji of Nawanagar was first to realise that economic development of his State depended largely upon the development of good roads. He also visualised that the best interests of the State lay in co-ordinating motor transport with rail transport and, therefore, looked upon the two forms of transport as complimentary rather than competitive. He, therefore, decided in 1931 to entrust the entire road transport arrangements to the State Railway administration with the result that all private competition was totally eliminated. The Nawanagar State Bus Services Association operating at that time was placed under the control of the State Railway under a contract system which provide for 85 per cent of the gross receipts to be paid to the contractors. Apart from financial gains to the State after payment of this percentage, large sums of money left to the State were utilised for the proper maintenance of roads and providing causeways and bridges where none existed in the past. A total of 210 miles of new roads was laid out, metalled and maintained and old roads kept in good repairs. Thus even prior to integration co-ordination between railways and motor buses was secured in this part of Saurashtra. With the development of a network of roads in Saurashtra, connecting the length and breadth of the peninsula, road transport by public carriers has immensely expanded. The growing pace of industrialisation has been helped considerably by the quicker and more convenient transport of passenger and goods traffic by road.

WATERWAYS, FERRIES AND BRIDGES

Because of a long coastline, the district has nine working ports, viz., (1) Bedi, (2) Sikka, (3) Salaya, (4) Jodiya, (5) Pindara, (6) Okha, (7) Beyt, (8) Dwarka, and (9) Lamba.

For the purpose of administration, the ports in the district are divided into two groups-Bedi and Okha and are in charge of respective Port Officers. Bedi group of ports consists of Bedi, Sikka, Salaya, Jodiya and Pindara, while the Okha group consists of Okha, Dwarka and Beyt. The port of Lamba has been placed under Porbandar group. A brief description of each of these ports is given below.

Bedi—Bedi is one of the most important intermediate ports in the State situated on the south coast of the Gulf of Kutch and 395 miles or 632 km. north-west of Bombay.

Refering to Bedi creek, the *Statistical Account of Nawanagar* writes, "The Bedi creek possesses greater natural advantages than that of Jodiya, sheltered as it is by the Jindria and other mangrove swamps and the Pirotan island."[1] The Customs Agreement which the Nawanagar State entered into with the Government of India in 1917 provided an excellent opportunity to the Darbar for developing the ports. It secured services of an experts who was appointed Commissioner of Ports and Customs in 1926. He devised measures for providing various facilities for developing the Bedi port by equipping the harbour with new docks, more rail roads, platforms, more ships, launches and lighters, cranes, wider quay, etc. The year 1926-27 marked the beginning of a permanent improvement on Bedi port which had cost the State Administration more than a crore and a quarter rupees.

After the integration of States in Saurashtra the administration of ports was placed under the railway authorities. When the Saurashtra railway system was integrated with that of the Indian Union, an independent unit was created and a separate administrative officer in the Communications Department was appointed to look after the administration of ports. According to the recommendations of the members of the West Coast Major Port Development Committee, whom the Government of Saurashtra invited to suggest an efficient and economical organisation for the administration of ports, ports were grouped into five geographical divisions, each under a Port Officer, working under the control and supervision of an administrative officer styled Chief Engineer, Ports, with headquarters at Rajkot.

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1 WATSON, J. W., *Statistical Account of Nawanagar*, p. 11, 1879

A total expenditure of Rs. 107·08 lakhs was incurred during the Second and Third Plan periods for the development of Bedi Port which now handles sizeable inland and overseas trade. Its importance has been further enhanced by the fact that during monsoon when Porbandar is closed to the passenger traffic from Africa, it is diverted to Bedi port. It is an all-weather lighterage port where shipping remains intensive throughout the year. The anchorage is well sheltered from westerly winds which prevail from February to October and there is no particular swell or strong tidal current. Cargo works throughout the year, both by day and by night as Bedi Dock Basin is about 7 miles (11·27 km.) up the creek with extensive facilities for sailing vessels. Vessels bound for Bedi port enter the Gulf of Kutch and approach Bedi near Pirotan island. Vessels bound for the anchorage or leaving the anchorage can navigate at any stage of the tide during day or night.

Port Facilities—A fleet of lighters is maintained by the port for serving steamers berthed at the anchorage. The fleet at present consists of thirty-eight lighters having capacity ranging from 100 to 250 tons, the total carrying capacity being 4,750 tons. The port also provides towage facilities between the anchorage and Bedi dock Basin. There are in all eleven towing units, five of which have 350 B. H. P. to 400 B. H. P. engines. The lighters mentioned above also include one coal-*cum*-water barge and one edible oil-*cum*-general cargo steel barge having capacity of 100 to 150 tons of vegetable oil or 113 tons of general cargo respectively. Other facilities at the port include ten cranes with capacity ranging from 2½ to 10 ton, ten transit sheds having a total floor space of 92,819 sq. feet or 8,594 sq. metres and seventeen storage godowns having a total floor space of 248,800 sq. feet or 23,037 sq. metres.

Air and Rail Connection—Being nearer to Jamnagar, Bedi port can be said to have been connected by air services to Bombay and Kutch. By rail too, it is well linked with the metre gauge railway system of the country serving within its natural hinterland, the important centres of trade and industry in Gujarat, Rajasthan and Northern India. The port is well served by roads, telegraph, telephone and wireless communications.

Trade—Maritime trade with all the ports of India, Asia, Europe and America is carried on throughout the year from this port. The principal articles of imports at the port are dates, building materials, coconuts, cotton seeds, oilcakes, iron and steel, mineral oil, tea and timber. Exports consist of bauxite, bone and bonemeal, groundnut oil in barrels, oilcake, groundnut seed, onion, raw wool, salt and castor seed, Passenger services are also operated between Africa and Saurashtra from this port.

During the year 1964-65, Bedi port handled 464,056 tonnes of cargo amounting to 14·52 per cent of the total traffic of the State ports. Vessels

visiting the port during the year numbered 695, of which 181 were steamers, both foreign and coastal. Passenger traffic from Africa amounted to 1,481 persons.

Sikka Port—Sikka is an intermediate port situated on the southern side of the Gulf of Kutch. It is situated at a distance of about 40 miles (64 km.) from Okha and about 18 miles (29 km.) from the mouth of Bedi creek. Its anchorage is about 2½ miles from the shore. The entrance to the Sikka channel from the sea is about 2,000 feet wide. The channel is safely navigable all the year round. As remaked by the Intermediate Ports Development Committee and Ports Technical Committee, Sikka is a good natural harbour with a sheltered anchorage having a depth of seven fathoms. Cargo can be handled at the anchorage to the westward of the Goose Island Reef where ocean going steamers can load and discharge. There are no berths. Steamers anchor in the stream, as it is a lighterage port. It has neither wharves, quals nor cranes but three slopes belonging to Shree Digvijay Cement Company Limited served with railway siding. Crafts are placed alongside these slopes for loading and unloading. Sikka is connected by rail and well served by roads, telegraph and telephone communications, besides a dry dock and a thermal power station for the supply of electricity.

The principal articles of imports are coal, coke, gypsum, gunnies and iron and steel. Exports consist of cement clinker and salt. The total traffic at the port during the year 1964-65 amounted to 265,481 tonnes, imports being 70,747 tonnes and exports 194,734 tonnes.

Salaya Port— Salaya is a non-intermediate port situated on the south coast of the Gulf of Kutch. It is situated on the Salaya creek and is 352 nautical miles from Bombay. It is a natural and safe harbour. There are no berths. Salaya creek is dry at low water. The main traffic is by sailing vessels. The only facility it has is one transit shed with a floor area of 2,000 sq. feet. There is no railway siding at the port, though Salaya town has a metre gauge rail connection through which it is connected with the rest of India. It is served by a *kachha* road and also enjoys the facility of telegraph and telephone communications.

The principal articles of imports are wood and timber, cotton seeds, cement, etc. Exports consist mainly of salt in bulk carried to Calcutta and ports of Japan and bauxite, onions, etc. The total traffic handled at the port during the year 1964-65 was 47,885 tonnes. Imports contributed 2,639 tonnes while exports 45,246 tonnes.

Jodiya Port—Jodiya, a non-intermediate minor port, is situated on the eastern side of the Gulf of Kutch about 13 miles north eastward of Bedi port. Jodiya creek is dry at low water. The main traffic is by sailing vessels.

There is a wharf wall on the port having quayage length of 1,230' which is used for loading and unloading. Facilities of cranes, railway siding, barges and tugs are not available at the port. But Jodiya town has a rail connection with the metre gauge system through which it is connected with the rest of the country. The port is connected with Jodiya town by a *kachha* road and is served by telegraph and telephone communications.

During the year 1964-65 the total tonnage of goods handled at the port amounted to 120 tonnes, all of which were contributed by imports of cement, wood and timber and building materials.

Pindara Port—Pindara is a minor port on the southern coast of the Gulf of Kutch, about 40 miles south-west of Bedi port, without any of the usual facilities a port requires.

Imports are mostly nil. Exports consisted of bauxite and gypsum amounting to 110 tonnes carried by sailing vessels during the year 1964-65.

Okha Port—This is the premier, all weather, intermediate, berthing port of Gujarat open both to foreign and inland traffic. It is situated at the mouth of the Gulf of Kutch at the north-west corner of the Saurashtra peninsula about 323 nautical miles from Bombay. It is a port endowed with a natural harbour providing shelter throughout the year. Being favourably situated on direct sea-routes, ships can call at the port by diverting their course by a few miles, without much loss of times or additional expense. The Royal Indian Marine surveyed the site of Okha in 1882. Alignment of the pier was surveyed in 1911. In 1922-23 the Royal Indian Marine resurveyed the harbour before construction. The port started functioning from 25th October, 1925, whereas it was formally opened by late Maharaja Sayajirao III, the Gaekwad of Baroda on February 14, 1926. Since then the port has witnessed a rising tempo of activity. Steamer cargo is handled by lighters in fair season at roadstead closer to the anchorage where vessels of deep draughts anchor. Its working is easy as the distance from the shore to the roadstead is hardly three quarters of a mile. There is no particular draught restriction for working at the roadstead. Sayaji Pier, named after the ruler of Baroda, is an R. C. C. construction built in 1925. It has a 400 feet long frontage, projecting into the sea, connected by a 500 feet long approach joining the mainland. The width of the pier is designed in such a way that it is capable of berthing two vessels on either side. The pier is served by two metre gauge rail tracks with steam cranes erected thereon to facilitate direct discharge of cargo from steamer into the wagons. Two mooring buoys for berthing have been provided for ships mooring in harbour stream. Ships at mooring buoys can work expeditiously and easily day and night with lighters, as they are hardly 1,200 feet away from the shore.

For lighters and sailing crafts the construction work of a 1,000 feet or 304·8 metres long wharf wall was commenced during the First Five Year Plan and completed at a cost of Rs. 355,304 in 1957-58. The existing depth of the sea near the wharf wall also increased. The wharf is served by cranes and metre gauge railway. Sailing vessels berth at Adatra jetty which is 150′ × 10′ or 45·72 × 3·048 metres. A passenger jetty has lately been provided at the port for the facility of pilgrims visiting Beyt. Oil-tanker traffic is increasing rapidly at the port. As the existing facilities were incapable of meeting the additional traffic of goods other than oil-tankers, it was decided to construct a 'Dry Cargo Berth' for which a special design was prepared and an expenditure of Rs. 6,184,690 was incurred during the Third Five Year Plan. It would be possible to accommodate increased traffic of steamers on completion.

The port flotilla and appliances include 24 barges, 4 tugs, 2 launches and 8 cranes with lifting capacity of 1 tonne to 6 tonnes, 4 shunting engines and 138 wagons for the movement of cargo. Pilotage is compulsory at this port. Ships and sailing vessels of 200 ton and above have to anchor about 1½ miles north-north-west of Samiyani Light Tower, from where they can enter the port only with port Pilot on board.

The port has a metre gauge railway connection since it started working in 1925. There is an asphalt road between Okha and Dwarka. Motor trucks also play a very important role in transporting cement and chemicals from factories to the port as well as oil in bulk and in containers.

Two transit sheds at an expenditure of Rs. 219,089 were built during the Third Five Year Plan. It was also decided to provide additional storage at a cost of Rs. 8 lakhs, of which a godown having 33,000 sq. feet floor space has been constructed at a cost of Rs. 3.48 lakhs during the Third Plan.

The total traffic handled at this port during the year 1964-65 was 696,026 tonnes. Imports contributed 432,710 tonnes and exports 263,316 tonnes. Out of 171 steamers that called at the port during that year, 66 were oil-tankers. Sailing vessels visiting the port numbered 639.

Beyt Port—This minor port is situated off the Okha harbour. It is an island port and, therefore, can be approached by sea only. There is an R. C. C. jetty called passenger jetty for embarkation and disembarkation of passengers where sufficient water is available at high tide. The port has no trade worth mentioning but has the importance of being a sacred place for Hindus. A number of pilgrims visit the place every year. A number of sailing vessels ply between Beyt and Okha in sheltered waters for the transport of pilgrims.

The total import-export traffic handled at this port was 281 tonnes in the year 1964-65 import 169 tonnes and exports 112 tonnes. Chief items of imports are cement, wood and timber and miscellaneous articles. Similarly commodities of exports are cement and miscellaneous articles.

Dwarka Port (*Rupen*)—This is a minor port 22 miles south of Okha and about a mile from the Dwarka town. It is a fair weather port visited only by sailing vessels during the fair season.

Imports are wood and timber, building materials, superphospates, cotton seeds, etc., exports are mainly cement and fish. The total volume of traffic, amounted to 646 tonnes (imports 460 tonnes and exports 186 tonnes) during 1964-65.

Lamba—Lamba is a minor port of this district, administered by the Porbandar group of Ports, open only for coastal traffic. It has no export traffic. Imports consist of wood and timber only, which amounted to 43 tonnes during the year 1964-65

Ferry Services—Ferry services ply between Okha-Beyt, Okha-Gopi and Gopi-Beyt. The Okha-Beyt service is extensively used by pilgrims visiting the holy temples of Lord Krishna situated in Beyt. Pilgrims also sometimes visit Gopi which also has a temple of Shri Krishna. Rates charged for ferry service which is operated by sailing vessels only are Re. 0·25 per adult for a trip to Beyt from Okha. Re. 0·70 for Okha to Gopi and Re. 0·45 for Gopi to Beyt. Another ferry between Kutch-Mandvi and Okha is operated by mechanised sailing vessels only in fair weather.

Bridges and Causeways—There were 27 major bridges and 20 causeways during 1965-66 in the district, most of which were constructed after 1947 vide Appendix III at the end of the Chapter.

AIR TRANSPORT

The district is served by two aerodromes located at Jamnagar and Mithapur. The aerodrome at Jamnagar was constructed during the State regime and administered by the State. The Mithapur aerodrome is a private one, owned and managed by the house of Tatas. The air service to and from Jamnagar was first started in May, 1948 by M/s. Air Services of India Ltd., Bombay. Before integration there were two regular air services passing through Jamnagar. One was Bombay-Jamnagar-Bhuj-Karachi (daily) and the other was Bombay-Keshod-Porbandar-Jamnagar and Bhuj (thrice a week). The Government of India assumed the responsibility for the maintenance of aerodromes in the country from April, 1950. In 1953, civil aviation in India was nationalised and two autonomous corpora-

tions called Indian Airlines and the Air India International were formed. The maintenance of internal air services was entrusted to the Indian Airlines Corporation which operates the air services to different air ports in the country.

The aerodrome at Jamnagar is known as Gordhanpur. At present the Indian Airlines Corporation operates a daily air service connecting Jamnagar with Bombay and Bhuj.

REST-HOUSES

The State Government maintains at different places in the district three types of rest-houses, viz., Atithigrih, Vishram grih, and Aram grih. Atithi grih, formerly known as Circuit House, is a rest-house of first rank, Vishram grih formerly known as guest-house, is a rest-house of second category, while Aram grih formerly known as rest-house is a rest-house of third category. Lodging facilities are provided mainly for officers of various Government departments touring the district in the course of their duties. Some of these are also open to the public, preference being given to Government servants on duty. All types of rest houses are generally furnished with cots, fans, crockery, mattresses, tables, chairs and other articles. Besides tea and breakfast, meals are also provided in the Atithi grih and Vishram grih to the occupants on payment.

Rest-houses under control of Jamnagar District Panchayat are situated at Kalavad, Dhrol, Jodiya, Jamjodhpur, Lalpur, Khambhalia, Bhanvad, Balamdi Dam-site, Venu Dam-site, Kalyanpur, Beyt and Vijarkhi Dam-site (Kalavad taluka). The Atithi grih at Jamnagar and Vishram grih at Dwarka are under the control of the Executive Engineer (Roads and Buildings), Jamnagar. The Atithi grih at Jamnagar is a combined circuit house and rest-house. *Dharmashalas* and *choras* in many villages and towns are the old times rest-houses where a traveller could rest for a temporary period. *Dharmashalas* are often attached to temples built with the help of donation made by philanthropic persons. *Chora* located in the centre of the village-stands on a raised platform in front and generally has Ramji Mandir or the shrine of Shri Rama with a room attached. Here the village people congregate for meetings and on public occasions. Roadside travellers and mendicants are also allowed to rest.

In Jamnagar district there were approximately 73 *dharmashalas* and 18 *serais*. Dwarka, the famous centre of pilgrimage for the Hindus, accounted for the largest number.

Hotels, Lodging and Boarding Houses—Jamnagar is the only important town in the district which provides adequate facilities for lodging and boarding to visitors. Those which are important are listed below.

Sl. No.	Name	Address
1	2	3
1	Havmor Restaurant ..	.. Tin Batti, Jamnagar
2	Gulmarg Hotel ..	.. Tin Batti, Jamnagar
3	Janpath Hotel ..	.. Khambhalia Gate, Jamnagar
4	Dipak Hotel ..	.. Tilak Chawk, Jamnagar
5	Pragrai Hotel .	. Grain Market, Jamnagar
6	Govindashram Hotel ..	. Ranjit Road, Jamnagar
7	Dream Land Lodge ..	.. Station Road, Jamnagar
8	Geta Lodge .	. Station Road, Jamnagar
9	Everent Lodge ..	. Station Road, Jamnagar
10	Grand Hotel Lodge	. Tin Battl, Jamnagar
11	Chandra Mahal Lodge ..	.. Khambhalia Gate, Jamnagar
12	Lina Lodge ..	. Near Anupam Talkies, Jamnagar

There are in addition to these a number of restaurants and tea-shops in the city which serve snacks, in addition to hot and cold drinks.

Travel Agents and Guides—There are two travelling agencies in Jamnagar, viz., M/s. Harilal Prabhulal Shah and M/s. Dodhia Agencies, which also do the work of getting passports for the passengers going abroad.

At Dwarka, which is a religious centre for the Hindus, some people act as guides and move with pilgrims to show them different temples and acquaint them about their history and significance. A tourist Centre has been opened by the Directorate of Information at Dwarka from July 1965 which supplies useful information to the visitors.

Priests or Gors—Important centres of pilgrimage like Dwarka and Beyt are inhabited among others by Brahmins who act as priests or *gors* and perform a distinct service to the pilgrims. Each of them maintains in a separate book minute details of the names of the pilgrims who had visited the holy place in the past and accepted them as their *gor*. Such records give

them the right to act as priest to the members of the family of such pilgrims visiting the place in future. They move about with books in their hands, trying to identify the pilgrims as their patrons when they arrive at the railway station or bus depot. Each starts canvassing by accosting the pilgrim and spelling out their caste, home and the names of their ancestors. These priests are known to have wonderful memory as they have their books committed to heart. They immediately turn up that part of the book where they have patrons of that caste or place, and if a particular priest succeeds in showing the name of the ancestor of the pilgrim in his records others withdraw. These priests take charge of the pilgrims' kit, provide them lodging and boarding, if required, arrange for the *darshan* and also officiate at the *shraddha* ceremony usually done at such holy places. In return, pilgrims pay them according to their capacity and services rendered.

POSTS AND TELEGRAPHS

Prior to Independence, the Nawanagar State was backward in respect of post and telegraph facilities. There were 15 sub-offices, 76 branch offices and 16 telegraph offices. Consequent on the formation of the State of Saurashtra, roads were developed, road transport was nationalised and bus facilities were expanded covering a large part of the region. The measures automatically encouraged the expansion of postal facilities in the peninsula. The Jamnagar sub-office, which was working under the Post Office at Rajkot, was converted into head post office from 1960.

The post offices in Jamnagar district are now working under the Superintendent of Post Offices, Rajkot Division, Rajkot, in charge of Rajkot, Jamnagar and Junagadh districts. Information about posts and telegraphs offices in the district is given below by taluka.

Posts and Telegraphs Offices (as on 31st March, 1966)

Sl. No.	Taluka	No. of post offices	No. of telegraph offices	No. of postmen	No. of letter boxes	No. of villages without post offices
1	2	3	4	5	6	7
1	Bhanvad	33	1	6	35	48
2	Dhrol	8	1	3	29	29
3	Jamjodhpur ..	22	1	4	32	50
4	Jamnagar	43	7	68	80	60
5	Jodiya	18	2	3	29	30
6	Kalavad	17	1	3	29	80
7	Kalyanpur	13	2	5	25	47

Sl. No.	Taluka	No. of post offices	No. of telegraph offices	No. of postmen	No. of letter boxes	No. of village without post offices
1	2	3	4	5	6	7
8	Khambhalia ..	7	1	8	21	39
9	Lalpur	19	1	3	32	34
10	Okhamandal.. ..	8	3	2	22	34
	Total	168	20	105	334	451

Source :
Superintendent of Post Offices, Rajkot Division, Rajkot

Besides its normal functions which include sale of postage stamps, post-cards, envelopes and remittance of money-orders, savings bank facilities are also offered to the public at the head office and sub-offices. A combined office (C. O.) renders normal postal services along with telegraphic services. Those villages which do not have a post office are served by the nearby branch office which delivers the post either daily or periodically. Out of a total of 720 villages, 451 are still without post offices.

Telephones—Before the telephone exchange system was taken over by the Posts and Telegraphs Department in 1951 from the Nawanagar Electricity Supply Company, there were 14 exchanges in the district.[1] The first to be installed was in Jamnagar city in 1926. A Central Battery Multiple (C. B. M.) exchange was installed for the first time after Independence in the city in 1954 linking it with Rajkot by a trunk line alignment. More exchanges were subsequently installed at other places in the district and the capacity of Jamnagar city exchange was also increased from time to time. Statement VII.3 that follows shows the present position of telephone exchanges in the district.

The following are the trunk lines operating in the district : (1) Jamnagar-Rajkot, (2) Jamnagar-Ahmedabad, (3) Jamnagar-Bombay, (4) Jamnagar-Dwarka, (5) Jamnagar-Khambhalia, (6) Jamnagar-Aliabada, (7) Jamnagar-Sikka, (8) Jamnagar-Okha, (9) Jamnagar-Kalavad, (10) Khambhalia-Salaya, (11) Khambhalia-Bhanvad, (12) Okha-Mithapur, and (13) Jamjodhpur-Upleta.

Trunk line alignment of public call offices exist between (1) Jodiya-Rajkot and (2) Dhrol-Rajkot.

1. They were existing at the following places. Year of their installation is also given in brackets. (1) *Jamnagar City*—Palace exchange-100 line Magneto Switch Board, (1930), (2) *Jamnagar City*—Chamber Exchange-50 line Mg. switch board (1934), (3) *Jamnagar City*—Darbargadh Exchange-20 line Mg. switch board (1948), (4) *Khambhalia*—10 line Mg. switch board (1931), (5) *Salaya*—10 line Mg. switch board (1931), (6) *Balachadi*—no board, only 5 line indicator (1931), (7) *Jodiya*—10 line Mg. switch board (1931), (8) Samana—10 line Mg. switch board (1930), (9) *Lalpur*—10 line Mg. switch board (1930), (10) Verad—10 line Mg. switch board (1930), (11) *Jamjodhpur*—20 line Mg. switch board (1930), (12) *Kalavad*—20 line Mg. switch board (1933), (13) *Bhanvad*—20 line Mg. switch board (1930) and (14) *Kandorana*—(now in Rajkot district) 10 line Mg. switch board (1930)

STATEMENT VII.3

Telephone Exchange, Public Call Offices and Trunk Line Alignment as on 31st March, 1967

Sl. No.	Name of the telephone exchange	Total No. of connections: Main	Total No. of connections: Extension	Trunk lines	Public call offices: Local P. C. O.	Public call offices: Trunk P. C. O.	Type of exchange and capacity
1	2	3	4	5	6	7	8
1	Jamnagar ..	981	170	9	9	2	CBM (1080)
2	Khambhalia ..	79	8	3	1	2	CBNM (100)
3	Dwarka ..	30	4	1	1	..	SAX (35)
4	Okha ..	58	6	2	1	..	CB (100)
5	Sikka ..	8	1	1	1	..	SAX (25)
6	Bhanvad ..	46	1	1	1	..	CB (100)
7	Mithapur ..	23	1	1	1	..	SAX (50)
8	Jodiya						
	(a) Rural exchange	2	..	..	..	..	Mg. (10)
	(b) Trunk P. C. O. ..	2	..	1	..	..	..
9	Dhrol (Trunk P. C. O.)	7	..	1	..	..	..
10	Salaya (Trunk P. C. O.)*	2	..	1	..	..	..
11	Aliabada (Trunk P. C. O.)	6	..	1	..	.	..
12	Kalavad						
	(a) Rural exchange	13	..	1	.	..	Mg. (20)
	(b) Trunk P. C. O. ..	2	..	1	..	..	..
13	Lalpur						
	(a) Rural exchange	1	..	..	..	..	Mg. (10)
	(b) Trunk P. C. O.	1	.	..	..	..	..
14	Jamjodhpur ..	59	1	1	1	..	CB (100)
15	Kalyanpur (Trunk P. C. O.)	2	..	..	..	..	..
16	Samana (Rural exchange)	2	..	..	..	.	Mg. (10)
17	Verad (Rural exchange)	..	...	..	—	..	Mg. (10)
18	Vansjalia	1	..	..	..	..	Mg. (5)

*Converted into exchange 25 lines SAX from 14th October 1967.

C. B. M. =Central Battery Multiple
C. B. N. M. =Central Battery non-Multiple
S. A. X. =Small automatic exchange
Mg. =Magneto
P. C. O. =Public Call Office

Radio Wireless—There is no broadcasting station in the district. Radio receiving sets which began to be used in the early thirties of this century in the district as in other parts of the country are becoming increasingly popular day by day. During the year 1965, 20,484 radio licences were issued.

Rural Broadcasting—Rural Broadcasting Scheme is operated by the Rural Broadcasting Division of the Directorate of Information, Government of Gujarat, which instals and maintains radio sets and takes out necessary licences for their use under a scheme known as the ' Contributory Scheme '. The Central Government contributes 50 per cent or Rs. 125 per radio set whichever is less whereas the remaining expenditure is borne by the participating villages. The number of radio sets installed in the district under this scheme was 172 at the end of the year 1966.

LABOUR UNIONS

There are seven organisations in the field of transport and communications in the district, registered under the Indian Trade Unions Act. 1926. They carry on trade union activities for the benefit of workers. The details regarding their names and addresses, dates of registration, membership, etc., are given below.

Sl. No.	Name	Date of registration	Members
1	2	3	4
1	Auto-rickshaw Drivers' Swatantra Union, Jamnagar	6th December, 1962	15
2	Transport Industries Kamdar Mandal, Jamnagar	29th March, 1957	28
3	Bedi Port Kamdar Mandal, Jamnagar ..	29th March, 1957	701
4	Port Kamdar Union, Jamnagar ..	30th July, 1957	57
5	Okha Port Worker's Union, Okha ..	19th January, 1955	141
6	Okha Godi Kamdar Mandal, Mithapur ..	4th December, 1963	150
7	State Transport Worker's Union, Jamnagar	19th May, 1958	300

No organisations of employers have been registered in the district.

APPENDIX I

Other District Roads

Sl. No.	Description	Length in km.	Sl. No.	Description	Length in km.
1	2	3	1	2	3
1	Aliabada--Vijarkhi Road ..	4.80	23	Beyt-Hanumandandi (Temple) Road	5.20
2	Nikava-Lodhika Road ..	4.80	24	Dwarka-Mendarda Road	24.40
3	Datrana-Ran-Gurgadh Road	14.40	25	Aniari Vav-Vachhu Road	10.40
4	Dhrafa-Vadala-Samana Road	3.20	26	Dwarka-Hamusar Road	18.40
5	Rampar-Balachadi Road ..	12.00	27	Gopi-Charakla Road	17.60
6	Jamnagar-Rajkot crossing to Aliafarm Road ..	8.00	28	Dhrevad-Tupani Road	13.40
7	Jodiya to Jodiya Bandar Road	4.80	29	Arambhada-Samlasar Road	12.40
8	Jodiya Amran to Paddhari Road	22.40	30	Nagnath (Nageshwar)-Mulvel Road	10.40
9	Dhrol-Latipur to Bhapsdad Road	4.80	31	Kalyanpur-Lalsivpura (Mojap) via Batisa Road	5.40
10	Ramapar-Jalia Devani Road	6.40	32	Mithapur-Padli Road	3.20
11	Latipar-Bangawadi Road	3.20	33	Adatra level crossing Road	1.00
12	Jambupat-Rinari Road ..	32.00	34	Tobar-Mevasa-Kalyanpur Road	10.40
13	Khatia-Sanosra Road ..	32.00	35	Mulvasar-Amari-Khatuba Road	4.80
14	Samana-Sadodar-Fulnath Temple Road ..	14.40	36	Goriali-Padli Road ..	6.40
15	Khambhalia-Salaya-Sykes point Road ..	22.40	37	Ran Causeway Road	1.60
16	Ghumli-Bhanvad Road ..	4.80	38	Dwarka-Okha Road (old Okha-Kalyanpur Road)	9.00
17	Kileshwar-Pachhtar Road ..	8.00	39	Kapurdi-Ghumli Road ..	6.40
18	Ghumli Pachhtar Road ..	9.60	40	Kapurdi Ranavav Road ...	8.00
19	Jamnagar-Porbandar-Junagadh Road ..	4.80	41	Pachhtar-Sakaroja Road ..	14.40
20	Bhatia-Ran-Pindara Road ..	12.80	42	Sakaroja-Atter Road .	8.00
21	Dwarka-Charakla Road ..	8.60	43	Dhola (Okha)-Mulvasar Road	11.60
22	Vasai-Arambhada Road ...	12.20			
				Total ..	**452.80**

Source :

Executive Engineer, Panchayat Division, Jamnagar

APPENDIX II

Village Roads

Sl. No. 1	Description 2	Length in km. 3
1	Sarmat-Vasai Para Road	8.00
2	Bhatia-Bhogat-Lamba Harshad Road	32.00
3	Balambha-Ranjitpar-Jamsar-Bhimkata Road	11.20
4	Dudhai-Bhimkata-Manamora-Kotharia Road	11.20
5	Shampar-Bela Road	4.00
6	Jodiya-Balambha Road	1.60
7	Keshia-Jodiya-Amran Road	2.40
	Others	78.60
	Total	149.00

Source :
Executive Engineer, Panchayat Division, Jamnagar

APPENDIX III

Major Bridges and Causeways, 1965-66

Sl. No.	Bridge/ Causeway	Name of the road	Category	River/Nalla	Length of Bridge (in feet)	Cost of construction Rs.	Year of construction
1	2	3	4	5	6	7	8
1	Bridge	Rajkot-Jamnagar-Okha	S. H.	Bavni	402	254,087	1954
2	,,	,,	,,	Masanio Vonkalo	135	..	..
3	,,	,,	,,	Und	612	..	1951
4	,,	,,	,,	Vankia	135	..	..
5	,,	,,	,,	Kankavati	261	..	1951
6	,,	,,	,,	Kalindi	190	..	..
7	,,	,,	,,	Kashi	135	..	..
8	,,	,,	,,	Ruparel	214	..	..
9	,,	,,	,,	Khari	248	..	..
10	,,	,,	,,	Vonkalo	300	..	..
11	,,	,,	,,	Ghee	490	368,118	1960
12	,,	,,	,,	Khodiar	120	107,525	1962
13	,,	,,	,,	Nagmati and Rangmati	720	..	..
14	,,	,,	,,	Vankvaya	225	..	1964
15	,,	,,	,,	Limbdi	160	..	1964
16	,,	,,	,,	Khari	210	277,894	1963

APPENDIX III—*contd.*

Sl. No. 1	Bridge/ Causeway 2	Name of the road 3	Category 4	River/Nalla 5	Length of Bridge (in feet) 6	Cost of construction Rs. 7	Year of construction 8
17	Causeway	Bhatia-Kalyanpur	M. D. R.	Sani	1320	..	1957
18	"	Rajkot-Kalavad	"	Ruparel	453	76,130	1963
19	"	"	"	Kalindi	352	48,400	1963
20	"	Jamnagar-Kalavad	"	Dhorawadi	501	117,000	1955
21	"	"	"	Sangado	534	55,000	1954
22	"	"	"	Fulzar	676	175,000	1956
23	"	"	"	Ruparel	363	60,000	1954
24	"	"	"	Rangmati	553	200,000	..
25	"	"	"	Zudpat	366	100,000	..
26	Bridge	Khambhalia-Bhanvad	"	Sorathi	220	11,082	1961
27	"	"	"	Vartu	450	282,438	1961
28	"	Dhrol Jodiya	"	Vagudalia	236	..	(Before 1947)
29	"	"	"	Barnala	152	..	"
30	"	"	"	Patilia Vonkala	145	..	"
31	"	Jodiya-Amran-Kharachia	"	Aji river	114	..	1955
32	Causeway	"	"	Khari	474	..	..
33	"	"	"	Khari	795-3	..	..
34	Bridge	Bhanvad-Balva	"	Minsar	100	..	..
35	Causeway	Jamnagar-Samana-Jamjodhpur	"	Vonkala	151	..	..
36	"	"	"	Vonkala	200	..	..
37	"	"	"	Rupavati	231	..	..
38	"	"	"	Rangmati	675	..	..
39	"	"	"	Vonkala	165	..	..
40	"	"	"	Vonkala	215	..	..
41	Bridge	Jamjodhpur-Dhrafa-Samana	"	Venu	330	300,000	1965
42	"	Gingni-Sidsar Road	O. D. R.	Phulzar	140-6	..	..
43	"	"	"	Venu	515	..	..
44	"	Dhrafa-Valasan	"	Vaisani	..	..	..
45	Causeway	"	"	Fulzar	516	..	..
46	"	Sadosar-Fulnath	"	Fulzardi	300	.	..
47	"	Jamjodhpur-Gingni	"	Gandhari	100	..	..

Source :

Executive Engineers, Roads and Buildings and Panchayat, Jamnagar
S. H. = State Highway, M. D. R. = Major District Roads;
O. D. R. = Other District Roads.

CHAPTER VIII

MISCELLANEOUS OCCUPATIONS AND ECONOMIC TRENDS

LIVELIHOOD PATTERN

Economic development of an area or a tract has to take into consideration the agronomic prospects, together with the industrial potentialities. But in any study of economic growth the man-power potential plays a prominent part. In the past during the pre—1961 censuses the population was classified on the basis of income or economic independence. But the 1961 Census has emphasised the work done, or the economic activity pursued by an individual, rather than his earnings, so that, all those including children and women of the households who work, but do not earn enough for their maintenance, are also accounted for as workers. The general population of the district has accordingly been classified into two broad categories, viz.. workers and non-workers. Out of a total of 828,419 persons in the district, the number of workers engaged in some kind of economic activity or gainful work was 307,375, while the non-workers numbered 521,044. The ratio of workers to non-workers in the district was 37·10 to 62·90, the corresponding figures for the Gujarat State being 41·07 to 58·93. These figures indicate a slightly higher proportion of the economically inactive population in the district as compared to the State as a whole. The workers were, on the basis of the economic activity pursued, classified as follows into 9 industrial categories by the Census of 1961.

Category of Workers, 1961

Sl. No	Category of workers	Working population			Percentage of total workers
		Males	Females	Total	
1	2	3	4	5	6
1	As cultivator	105,449	59,798	165,237	53.76
2	As agricultural labourer ..	11,541	7,620	19,161	6.23
3	In mining, quarrying, livestock, forestry, fishing, hunting, plantation, orchards and allied activities ..	5,645	1,404	7,049	2.29
4	At household industry	17,740	5,465	23,205	7 55
5	In manufacturing other than household industry	20,601	2,788	23,389	7 61
6	In construction	3,018	748	3,766	1.23
7	In trade and commerce	16,982	455	17,437	5.67
8	In transport, storage and communications	9,268	200	9,468	3.08
9	In other services	31,589	7,074	38,663	12 58
	Total workers	*221,833*	*85,542*	*307,375*	*100 00*
	Non-workers	*202,467*	*315,577*	*521,044*	
	Grand total .. .	**424,300**	**404,119**	**828,419**	

Source :

District Census Handbook 1961, Jamnagar

Among the working population of the district 59·99 per cent are engaged in agricultural pursuits (cultivator 53·76 per cent and agricultural labourers 6·23 per cent) as against 68·09 per cent in Gujarat State. The proportion of workers engaged in agricultural occupations is appreciably less than that in the State. The general economic pattern obtaining in the district, however, follows the State and shows the predominance of agriculture. Non-agricultural pursuits account for 40·01 per cent of the workers as against 31·91 per cent for the State. The percentage of workers employed in each of the non-agricultural pursuits is also likewise higher. Household industry (7·55 per cent) and manufacturing other than household industry (7·61 per cent) taken together constitute the most important non-agricultural categories accounting for 15·16 per cent of the workers. Other services account for 12·58 per cent, whereas trade and commerce and transport, storage and communications follow in order with 5·67 and 3·08 per cent respectively. Mining, quarrying, etc., and construction each engage less than 2·5 per cent of workers.

The following table shows the distribution of workers under different categories in the rural and urban areas in 1961.

Distribution of Workers Under Different Industrial Categories in Rural and Urban Areas, 1961

Category of workers	Per cent of population		
	Total	Rural	Urban
1	2	3	4
Total	**37.10**	**41.67**	**28.80**
Agricultural Pursuits	*22.26*	*32.59*	*3.45*
1 As cultivators	19.95	29.18	3.13
2 As agricultural labourers	2.31	3.41	0.32
Non-agricultural Pursuits	*14.84*	*9.08*	*25.35*
1 In mining, quarrying, livestock, forestry, fishing, hunting, plantation, orchards and allied activities	0.85	0.98	0.62
2 At household industry	2.80	3.62	1.32
3 In manufacturing other than household industry	2.82	0.61	6.85
3 In construction	0.45	0.42	0.52
5 In trade and commerce	2.11	0.91	4.28
6 In transport, storage and communications ..	1.14	0.19	2.88
7 In other services	4.67	2.35	8.88

Source :

District Census Handbook 1961, Jamnagar

Out of 37·10 per cent of the total population engaged in gainful economic pursuits, 22·26 per cent are engaged in agricultural pursuits and 14·84 per cent in non-agricultural pursuits. Whereas agricultural pursuits predominated in rural areas wherein cultivation of land is the primary economic activity, non-agricultural pursuits claim most of the workers in towns, where 'other services' occupy a prominent place.

Household and Non-household Industries—A household industry is an industry which is not run on the scale of a registered factory, but conducted by the head of the household himself and/or mainly by the members of the household at home, or within the villages in rural areas, and only at home in urban areas, the need for keeping employees on salary or wages being negligible. Among those engaged in non-agricultural pursuits, 23,205 or 2·80 per cent of the total population are engaged in household industries and 99,772 or 12·04 per cent in non-household industries. The following statement classifies workers engaged in household industry according to their employment status into (a) employees and (b) others at the Census of 1961.

STATEMENT VIII.1

Employment Status of Workers Engaged in Household Industry, 1961

	Number				Employees			
	Males	Females	Total	Percentage of total	Males	Females	Total	Percentage of total
1	2	3	4	5	6	7	8	9
Total	**17,740**	**5,465**	**23,205**	**100**	**700**	**29**	**729**	**3.14**
Rural	15.286	4,056	19,342	..	600	10	610	..
Urban	2,454	1,409	3,863	..	100	19	119	..

	Others			
	Males	Females	Total	Percentage of total
1	10	11	12	13
Total	**17,040**	**5,436**	**22,476**	**96.86**
Rural	14,686	4,046	18,732	..
Urban	2,354	1,390	3,744	..

Source :

District Census Handbook 1961, Jamnagar

Out of a total of 23,205 persons engaged in household industries, 729 or 3·14 per cent are employees while 22,476 or 96·86 per cent are 'Others'. The predominance of self-employed persons and their family

members in household industries and the comparative absence of employees and hired labour are the salient features of household employment. The seasonal or permanent nature of employment household industry offers will be seen from the statement that follows.

STATEMENT VIII.2

Sample Principal Household Industry Classified by Period of Working and Total Number of Workers Engaged in Household Industry, 1961

(Based on 20 per cent Sample)

Total					1 to 3 months				
Number of households	Percentage of total number of households	Family workers		Hired workers	Number of households	Percentage of total number of households	Family workers		Hired workers
		Males	Females				Males	Females	
1	2	3	4	5	6	7	8	9	10
2,506	100.00	3,880	1,229	92	21	0.84	26	12	

4 to 6 months					7 to 9 months				
Number of households	Percentage of total number of households	Family workers		Hired workers	Number of households	Percentage of total number of households	Family workers		Hired workers
		Males	Females				Males	Females	
11	12	13	14	15	16	17	18	19	20
117	4.67	150	69	1	237	9.45	349	171	6

10 months to 1 year					Unspecified				
Number of households	Percentage of total number of households	Family workers		Hired workers	Number of households	Percentage of total number of households	Family workers		Hired workers
		Males	Females				Males	Females	
21	22	23	24	25	26	27	28	29	30
2,007	80.09	3,155	940	81	124	4.95	200	37	4

Source :
District Census Handbook 1961, Jamnagar

These figures give an important indication about the seasonality of household industries run on household basis. 80·09 per cent of the households work for a period of 10 months to 1 year, 9·45 per cent for 7 to 9 months, 4·67 per cent for 4 to 6 months, 0·84 per cent for 1 to 3 months, and

the 4·95 per cent for an unspecified period. It is evident from these figures that the proportion of households as well as workers goes on increasing with every increase in the period of working.

The employment status of persons engaged in non-household industries is broadly classified into (a) employers, (b) employees, (c) single workers, and (d) family workers by the 1961 Census.

A single worker is a person who works by himself but not as head of household industry. He is not employed by any one else and in his turn does not employ anybody else, not even members of his household except casually. A family worker is a person who is a member of a household working without receiving wages in cash or kind, in an industry, business or trade conducted mainly by members of the family and ordinarily does at least one hour of work everyday during the working season.

The details of different categories of workers are given below in Statement VIII.3.

STATEMENT VIII.3

Employment Statistics of Persons at Work in Non-household Industries, 1961

	Number				Employers			
	Males	Females	Total	Per-centage of total	Males	Females	Total	Per-centage of total
	1	2	3	4	5	6	7	8
Total	**87,103**	**12,669**	**99,772**	**100**	**8,486**	**115**	**8,601**	**8.62**
Rural	23,904	5,295	29,199	..	2,407	51	2,458	
Urban	63,199	7,374	70,573	..	6,079	64	6,143	..

Employees				Single workers				Family workers			
Males	Fe-males	Total	Per cen-tage of total	Males	Females	Total	Per-cen-tage of total	Males	Fe-males	Total	Per cen-tage of total
9	10	11	12	13	14	15	16	17	18	19	20
46,274	**6,750**	**53.024**	**53,15**	**24,465**	**4,920**	**29.385**	**29.45**	**7,878**	**884**	**8,762**	**8.78**
9,158	1,960	11,118	..	9,280	2,703	11,983	..	3,059	581	3,640	.
37,116	4,790	41,906	..	15,185	2,217	17,402	..	4,819	303	5,122	.

Source :

District Census Handbook 1961, Jamnagar

This statement discloses that among those engaged in non-household industries, 53·15 per cent are employees, 8·62 per cent work as employers, 29·45 per cent single workers and 8·78 per cent family workers. Among female workers, the percentage of those who work as employees is the largest followed by those working as family workers and single workers in order. But unlike household industries the proportionate employment of female workers in non-household industries of urban areas is much less than for the rural areas.

In view of the importance of agriculture and traditional crafts in the economy of the district, as also in the State as a whole, economic data relating to the number of households engaged (a) in household industry only, (b) both in household industry and cultivation, (c) in cultivation only, and (d) neither in cultivation nor household industry are analysed below.

Sample Household Engaged in Different Activities, 1961

(Based on 20 per cent Sample)

	Total No. of households 1	Households engaged in household industry only 2	Households engaged both in household industry and cultivation 3	Households engaged in cultivation only 4	Households engaged neither in cultivation nor household industry 5
Total	**28,879**	**2,246**	**260**	**11,290**	**15,083**
Rural	18,182	1,846	246	10,704	5,386
Urban	10,697	400	14	586	9,697

Source:
District Census Handbook 1961, Jamnagar

The above figures bring out clearly the dominant feature of the economic set up which shows the overall importance of agriculture in rural areas. It can also be seen that proporationate number of households engaged neither in cultivation nor household industry is obviouly greater in towns than in villages, whereas the reverse position is revealed in the case of households working both in household industry and cultivation. This may be due to the tendency in rural areas to couple some household industry with cultivation where cultivation is uneconomic, as also to resort to cultivation where household industry by itself cannot afford work during the entire year to some of the traditional village artisans.

Principal and Secondary Work—In the working population there are some persons engaged in more than one productive activity, one being the principal work on which such persons spend most time, and the other secondary which is next in importance to the principal work.

The following statement gives the number of persons doing secondary work in the district in 1961.

I. Persons working principally as cultivators, agricultural labourers or in household industry and doing secondary work :

A. Persons working principally as cultivators and doing secondary work :

(i) at household industry 864
(ii) as agricultural labourers 869

B. Persons working principally as agricultural labourers and doing secondary work :

(i) at household industry 90
(ii) as cultivators 290

C. Persons working principally at household industry and doing secondary work :

(i) as cultivators 511
(ii) as agricultural labourers 387

These workers are classified by sex in the statement that follows.

STATEMENT VIII.4

Classification of Workers by Sex doing Secondary Work, 1961

Principal work		Secondary work: As cultivator			As agricultural labourer			At household industry		
		Males	Females	Total	Males	Females	Total	Males	Females	Total
1		2	3	4	5	6	7	8	9	10
As cultivator	Total	..	..	..	594	275	869	663	201	864
	Rural	..	..	..	530	270	800	652	200	852
	Urban	..	..	..	64	5	69	11	1	12
As agricultural labourer	Total	181	109	290	..	..	..	65	25	90
	Rural	163	97	260	..	..	..	65	25	90
	Urban	18	12	30	..	..	..	..	..	..
At household industry	Total	392	119	511	259	128	387	.	..	..
	Rural	358	104	462	259	128	387	..	..	..
	Urban	34	15	49	..	..	.	..	..	..

Source :
District Census Handbook 1961, Jamnagar

II. **Persons working in non-household industry, trade business, profession or service who are doing secondary work in household industry number 141.**

Out of a total of 165,237 persons engaged in cultivation, 1,733 or 1·05 per cent only do some secondary work. Of these, 869 work as agricultural labourers and 864 are engaged in household industry. Among agricultural labourers, the tendency to resort to a secondary work is comparatively more than is the case with those engaged in cultivation. Out of a total of 19,161 persons engaged as agricultural labourers, 380 or 1·98 per cent do some secondary work. Of the latter 290 or 1·51 per cent work as cultivators and 90 or 0·47 per cent are engaged in household industry. Out of 23,205 persons engaged in household industry, 898 or 3·87 per cent do secondary work in agricultural activities, 511 or 2·20 per cent as cultivators, and 387 or 1·67 per cent as agricultural labourers. Very few persons engaged in non-household industry, trade, business, profession or service take up household industry as secondary work.

Non-workers—The number of non-workers in the district was 521,044 (202,467 males and 318,577 females) distributed on a percentage basis as under according to the type of activity.

STATEMENT VIII.5

Distribution of Non-workers by Sex, According to Type of Activity, 1961

(IN PER CENT)

Sl. No.	Categories of non-workers	Total/ Rural/ Urban	Males	Females
1	2	3	4	5
1	Full-time students	T	31.82	8.43
		R	28.38	5.16
		U	37.07	13.25
2	Household duties	T	0.14	44.21
		R	0.18	41.19
		U	0.09	48.64
3	Dependents, infants and disabled ..	T	63.90	46.07
		R	68.77	52.30
		U	56.48	36.90
4	Retired, rentees, etc.	T	1.84	1.11
		R	1.08	1.19
		U	2.99	1.00
5	Beggars, vagrants	T	1.13	0.17
		R	1.23	0.16
		U	0.96	0.18
6	Inmates of penal, mental and charitable institutions	T	0.11	0.01
		R	0.13	N
		U	0.25	0.02
7	Persons seeking employment for the first time	T	0.37	N
		R	0.11	N
		U	1.76	N
8	Employed before but now seeking work ..	T	0.69	N
		R	0.22	N
		U	1.40	0.01

N = Negligible

Source :

District Census Handbook 1961, Jamnagar

The above statement gives interesting information about the type of activity of non-workers. The distribution pattern of non-workers in the various types of activities among males and females shows great dissimilarity. The largest percentage of non-workers among males is in the category 'Dependants, infants and disabled' accounting for 63·90 per cent followed by those who are 'Full-time students' 31·82 per cent. These two categories jointly account for 95·72 per cent. Among female non-workers, the corresponding percentages are 46·07 per cent and 8·43 per cent respectively, and jointly account for 54·50 per cent. The higher percentage of dependants among males may be explained by the general absence of household duties among them. For the category 'Household duties', males constitute only 0·14 per cent against females 44·21 per cent. The percentage of females engaged in household duties is higher in urban areas than in the rural areas, as women-folk in rural areas, in addition to houshold duties, also participate in agriculture and household industry. The higher percentage of male 'Full-time students' as compared to females is significant in that it reflects the prevalent social conditions which differentiate males and females in the matter of imparting education. While for one it is an economic necessity, it is merely an acquisition for the other. A higher percentage of full-time students in urban areas as compared to the rural indicates the greater consciousness and opportunities the town-folk have in matters of education. The percentage of unemployed persons seeking employment is very small for males, and practically nil for females.

OCCUPATIONAL DISTRIBUTION—'Industry' and 'Occupation' represent two separate and distinct concepts. 'Industry' signifies that field of economic activity in which an individual is engaged, e. g., textile industry, automobile industry etc., while 'Occupation' describes the exact function that a person performs, e. g., as carpenter, fitter, salesman, mechanic, etc.

The percentage distribution of persons at work in occupations other than cultivation in 1961, given in Statement VIII.6 at the end of the Chapter, shows that the most important category of occupations besides agriculture is "Craftsmen, Production, Process Workers and Labourers, not elsewhere classified" accounting for 46·7 per cent of the total such workers. The next important category is 'Sales Workers' in which 11·78 per cent of such workers are engaged, followed by "Farmers, Fishermen, Hunters, Loggers and Related Workers (10·94 per cent), Service, Sports and Recreation Workers" (7·47 per cent), "Workers in Transport, Storage and Communications Occupations" (6·67 per cent), "Clerical and Related Workers" (6·68 per cent) and "Professional, Technical and Related Workers" (5·06 per cent), "Administrative, Executive and Managerial Workers" claim only 3·93 per cent, whereas "Mines, Quarrymen and Related Workers" and "Workers not Classified by Occupation" form a relatively insignificant proportion of the workers.

The Housing and Establishments Census conducted for the first time in 1960 supplies some very interesting and instructive statistics about the industrial establishments and number of persons employed in them as given in the following statement.

STATEMENT VIII-7

Industrial Establishments, 1961

Sl. No. 1	Description 2	No. of units 3	No of persons employed 4
1	Manufacture of other wood and allied products ..	727	1,580
2	Manufacture of common salt	4	1,408
3	Production of edible fats and oils	96	1,301
4	Making of textile garments	625	1,220
5	Manufacture of sundry hardwares	312	1,027
6	Production of rice, *atta*, flour, etc.	432	937
7	Manufacture of jewellery, silverware, and wares using gold and other precious metals	399	896
8	Manufacture of shoes and other leather footwear ..	287	662
9	Manufacture of brass and bell metal products	84	578
10	Cotton spinning and weaving in mills . ..	1	500
11	Production of other food products such as sweetmeats and condiments, etc.	139	319
12	Manufacture of metal products (other than of iron, brass, bell metal and aluminium), such as tin can ..	12	312
13	Manufacture of wagons, coaches, tramways and other rail road equipment	1	293
14	Manufacture of *bidi*	63	230
15	Cotton ginning, cleaning, pressing and baling	7	228
16	Manufacture of earthenware and earthen pottery ..	72	218
17	Manufacture of cement and cement products	5	152
18	Manufacture and assembling of machinery except textile machinery	33	134
19	Repairing of bicycles and tricycles	80	110
20	Production of bread, biscuits, cakes and other bakery products	24	108
21	Manufacture of wooden furniture and fixtures . ..	42	101
22	All other types of printing including lithography, engraving, etching, block making	27	96

STATEMENT VIII·7—*contd.*

Sl. No. 1	Description 2	No. of units 3	No. of persons employed 4
23	Cotton weaving in handlooms	28	94
24	Manufacture of fertilizers	2	90
25	Sawing and planing of wood	15	87
26	Manufacture of soap and other washing and cleaning compounds	13	71
27	Repairing and servicing of motor vehicles	16	70
28	Manufacture of dyes, paints, colours and varnishes ..	2	50
29	Repairing of watches and clocks	23	23
30	Manufacture of other chemicals and chemical products not covered above (including inedible oils and fats) ..	1	15
31	Currying, tanning and finishing of hides and skins ..	2	12
32	Manufacture of medicines, pharmaceutical preparations, perfumes, cosmetics and other toilet preparations except soap	3	11
	Total	*3,577*	*12,935*
	Others	300	2,164
	Grand Total	**3,877**	**15,099**

Source :
Census of India 1961, Vol. V, Gujarat, Part IV-A, *Report on Housing and Establishments*

The total number of industrial establishments in the district was 3.877, distributed almost equally between rural and urban areas and provided employment to 15,099 persons. Statistics relating to the number of establishments and the number of persons employed by them shows that the most important industries which offer employment to the people are those relating to food, clothing and housing. As a result, a large number of persons were found employed in the production and processing of food products, manufacture of textiles and making of textile garments and manufacture of wood and other products. In other words, traditional crafts wherein artisans like carpenters. tailors, shoemakers, blacksmiths, goldsmiths, etc., are engaged still provide employment to a relatively larger number of persons. The increasing popularity of *bidi* smoking is, however, evident from its accounting for 63 units employing 230 persons. With the advent of mechanisation, new industries operated on small and medium scale have also made their appearance. Those important among them are cement, spinning and weaving in textile mills, manufacture and assembling of machinery, wagons, coaches and rail-road equipments. etc. Among the existing industries which have been modernised and give employment to an appreciable number in the district

is the manufacture of common salt (1,408). Industries like printing presses, making of bread, biscuits, etc., repairs of bicycles and motor cars, repairs of watches, clocks, manufacture of soap, chemicals, etc., which did not exist in the past have also come into existence in recent times. These figures give a broad picture of the comparative importance the household and traditional crafts enjoy even today and the changing face of the industrial and occupational structure in the district.

The number of persons engaged in rural and urban areas in certain miscellaneous occupations, selected from among those other than cultivation in 1961 are given in Statement VIII.8 appended at the end of the Chapter. Persons working as teachers (3,241) and those engaged as "tailors, cutters, furriers and related workers" (3,201) claim the largest number. Among the former those working in middle and primary schools preponderate. Other important occupations include in order millers, bakers, brewmasters and related food and beverage workers (2,827), administrators and executive officials, Government (2,320) barbers, hair-dressers, etc. (1,624) and persons engaged in arts, letters and science (1,513). In the last group, artists, writers, social scientists and related workers together numbered 208. Considering the relative strength of workers in the urban and rural areas, it is seen that the number of persons working in most of the above categories of occupations was larger in urban areas than in the rural areas. This is as it should be in view of the greater employement opportunities in towns than in villages. Analysing the sex ratio of workers, it is found that females preponderate in such occupations as dairy workers (non-farm), house-keepers, cooks, maids and related workers where they are in greater demand than males. It also indicates the limited scope women have for employment in gainful pursuits

Liberal Professions

For determining the economic condition of the people engaged in liberal professions, their importance in the life of the district and their special problems, if any, a representative survey of persons following such professions which are mostly urban was conducted in Jamnagar city in December 1968. The survey covered such professions as teachers, lawyers, doctors, nurses, engineers and architects including draughtsmen, librarians, painters, astrologers, etc. Based on this survey a broad idea about the aspects aforementioned is given below for Jamnagar city.

Teachers—Teachers play a significant role in the cultural life of the district. They include those in the primary schools, secondary schools, higher educational institutions and those not elsewhere classified. The Census of 1961 has returned a total number of 3,241 teachers of whom 2,644 were engaged in middle and primary schools, 321 in secondary schools, 82 in university and higher educational institutions and 194 others not elsewhere

classified. This profession claimed 2,483 males and 758 females, the strength of women teachers being higher in middle and primary schools and comparatively less in higher educational institutions. During the course of the survey it was found that the average monthly income of primary school teachers, who accounted for the largest number in this profession, varied from Rs. 200 to 300. This was found to be barely sufficient to maintain a reasonable standard of living for family owing to high cost of living caused by great increase in prices of essential commodities in recent times. It was reported by the households surveyed that they had to take loans from co-operative societies and banks to meet the increased cost of living. The average monthly income of high school teachers ranged between Rs. 300 to 500. This income, according to them, was on the whole sufficient for the maintenance of their families but insufficient to build up any reserve for the future. Teachers in higher educational institutions forming a small part of the total number of persons engaged in this profession, were by and large placed in a comparatively better economic condition. Their average monthly income varied from Rs. 500 to 2,000 depending upon the nature of post held, qualifications, experience and length of service. They were in a position to maintain a high standard of living and were also able to save some portion of their income regularly.

Lawyers—This class of persons though small in number plays an important role in the public life by actively associating itself with the social and political activities of the district. According to the 1961 Census there were 90 legal practitioners and advisers in the district. The number rose to 118 in 1968 and was distributed as under.

Sl. No.	Name of the town	Number of lawyers	Sl. No.	Name of the town	Number of lawyers
1	Jamnagar	82	6	Jamjodhpur	5
2	Dhrol	4	7	Kalavad	6
3	Khambhalia ..	9	8	Dwarka	6
4	Kalyanpur	1	9	Lalpur	1
5	Bhanvad	4		Total	118

The survey further revealed that the income derived by the legal practitioners from their profession depended to a very great extent on their personal abilities, talent, experience, standing and status. There was a wide disparity in individual earnings, owing to keen competition among them. Those more fortunately placed among them earned much more. While some had a monthly income ranging between Rs. 500 to 1,000, those occupying high place in the profession earned as much as Rs. 3,000 to 5,000. Their standard of living was obviously high and their saving appreciable. Jamnagar city has a Law College and a Bar Association.

Medicine—In modern times medical personnel occupy a more important position in the society. The 1961 Census has returned 1,279 persons (968 men and 311 women) engaged in the medical and other health services. The break-up of these services is as follows.

Sl. No.	Groups	Males	Females	Total
1	2	3	4	5
1	Physicians, suregons and dentists	306	24	330
2	Nurses, pharmacists and other medical and health technicians	662	287	949

Source :

District Census Handbook, 1961, Jamnagar. p. 47

The number of doctors has, of late, been on the increase as the district is fortunate in having a Medical College and an Ayurvedic University at its headquarters which help persons in taking up courses in medical science. The survey disclosed that the medical profession was very lucrative. The average monthly income of a doctor varied from Rs. 600 to 2,000 and was higher in some cases. There was a keen competition among the members of this profession, who generally preferred to settle in urban areas rather than villages. Their income was sufficient to ensure a comfortable standard of living and also leave a sufficient margin for savings.

Nurses, pharmacists and other medical and health technicians were found to have an average monthly income ranging from Rs. 300 to 500.

Arts, Letters and Science— Persons returned under 'Arts, Letters and Science' were, according to the 1961 Census, engaged in the following professions.

Sl. No.	Occupations	Males	Females	Total
1	2	3	4	5
1	Architects, Engineers and Surveyors ..	285	..	285
2	Biologists, Veternarians, Agronomists, and Related Scientists	11	1	12
3	Social Scientists and Related Workers ..	66	6	72
4	Artists, Writers and Related Workers ..	131	5	136
	(a) Authors.	5	..	5
	(b) Editors, Journalists and Related Workers	4	..	4
	(c) Translators, Interpreters and Language Specialists	1	..	1
	(d) Painters, Decorators, and Commercial Artists	23	1	24
	(e) Sculptors and Modellers	1	..	1
	(f) Actors and Related Workers ..	32	4	36
	(g) Musicians and Related Workers ..	62	..	62
	(h) Dancers and Related Workers ..	1	..	1
	(i) Artists, Writers and Related Workers Not Elsewhere Classified	2	..	2

Sl. No.	Occupations	Males	Females	Total
1	2	3	4	5
5	Draughtsmen and Science and Engineering Technicians	80	1	81
6	Other Professional, Technical and Related Workers (including Ordained and Non-ordained Religious Workers, Astrologers, Palmists and Related Workers, etc.)	873	54	927
	Total	1,446	67	1,513

Source :

District Census Handbook 1961, Jamnagar, pp. 47-48, 71

Architects, engineers and surveyors account for 285, artists, writers and related workers 136, draughtsmen, science and engineering technicians 81 and social scientists and related workers 72. The largest number 927 is, however, claimed by other professional, technical and related workers. These statistics throw light on expansion of developmental activities consequent upon the implementation of the various Five Year Plans which witnessed an increasing tempo of building activities and extensive construction of works of public utility which require the services of architects, engineers, draughtsmen, etc., in large numbers. Like the medical and legal professions these professions are also quite lucrative. The survey disclosed that the average income of those in Government and semi-Government jobs varied on an average between Rs. 500 to 1,000 per month, while those who worked on their own and those who were engaged by private firms earned on an average more than Rs. 1,000 per month. Their standard of living was fairly high and they were in a position to save also.

Social scientists and related workers comprising economists, accountants, etc., were in a position to maintain a fairly high standard of living and also made good saving. On account of increase in the industrial and commercial activities, the demand for accountants has gone up in recent times. Their earning depends upon their status, length of service, etc., and ranged between Rs. 400 and Rs. 500.

Artists, writers and related workers, are in limited demand because of the nature of activities they pursue which are purely cultural. Their existence depend mainly upon patronage and encouragement by the people at large. Most of them live hand to mouth, and their monthly average income which varied from Rs. 200 to 400 reflected a comparatively low standard of living.

PUBLIC ADMINISTRATION

Jobs in public administrative services are highly valued both by the educated and the uneducated persons, because of the security of employment and other amenities they provide. The 1961 Census has returned a fairly large number of persons (2,320) engaged in various branches of public administration distributed as under.

Number of Persons Engaged in Administrative Services, 1961

Sl. No.	Occupations	Males	Females	Total
1	2	3	4	5
1	Administrators and executive officials ..	2,292	28	2,320
2	Administrators and executive officials—Central Government ..	1,700	11	1,711
3	Administrators and executive officials—State Government ..	212	6	218
4	Administrators and executive officials—Local Bodies	72	2	74
5	Village officials	284	7	291

Source :
District Census Handbook 1961, Jamnagar

Amenities to Public Servants—Besides providing for such relief as dearness allowance, house rent, compensatory city allowance and festival advance, the State Government has made provisions for the granting of loans for constructing residential buildings and purchase of vehicles—motor cars, scooters, etc. Residential accommodation is also made available wherever possible. Besides reimbursement of expenses incurred, Government servants and members of their families enjoy free medical treatment at Government hospitals and dispensaries. Moreover, concessions of leave on average pay to Government servants for a period of one year and extraordinary leave for another twelve months are also allowed to Government servants suffering from tuberculosis. It also pays sanatorium charges which includes charges for accommodation and ordinary diet. In special cases, a fixed amount is also paid for special diet, specialised medicines and injections within prescribed limits during the period of convalescence.

Central Government employees and employees of the corporations like the Life Insurance Corporation, also have similar schemes of amenities provided by their respective authorities.

SELECTED MISCELLANEOUS OCCUPATIONS

An attempt was also made to have an idea of certain selected miscellaneous occupations in a highly urbanised centre like the city of Jamnagar

by collecting the requisite information through the local municipal authorities. Statistics furnished by them are embodied in the statement given below.

STATEMENT VIII.10

Persons Engaged in Certain Selected Occupations, Jamnagar City, 1966

Sl. No	Occupations	Number of establishments	Percentage to total number of establishments	Persons employed inclusive of employer				Percentage to total number of persons employed
				Males	Females	Children	Total	
1	2	3	4	5	6	7	8	9
1	Bakeries ..	11	0.72	32	..	..	32	1.12
2	Hotels, lodging houses, restaurants, and manufacture of aerated waters	271	17.70	762	39	28	829	28.98
3	Sweets and *farsans* ..	91	5.94	193	..	..	193	6.75
4	*Pan-bidi* ..	230	15.03	329	..	..	329	11.50
5	Hair-cutting saloons	131	8.55	166	..	.	166	5.80
6	Flour mills ..	86	5.62	159	..	..	159	5.56
7	Goldsmiths .	206	13.45	245	..	..	245	8.56
8	Laundries ..	69	4.50	133	..	..	133	4.65
9	Cycle repairing .	110	7.18	173	..	..	173	6.05
10	Tailoring ..	284	18.55	400	..	..	400	13.98
11	Mattresses and pillow makers	6	0.40	22	.	..	22	0.76
12	Dyeing and printing	36	2.36	180	.	.	180	6.29
	Total ..	**1,531**	**100.00**	**2,794**	**39**	**28**	**2,861**	**100.00**

Source :

Chief Officer, Jamnagar Borough Municipality, Jamnagar

The statement reveals that tailoring establishment (18·55 per cent), hotels, lodging houses, restaurants, and manufacture of aerated waters (17·70 per cent) and *pan-bidi* shops (15·03 per cent) which are the most popular among miscellaneous occupations claim the largest percentage and together account for 51·28 per cent of such establishments. Goldsmiths claimed 13·45 per cent, hair-cutting saloons 8·55 per cent, and cycle repairing units 7·18 per cent of the total establishments. Other occupations worthy of note are sweets and *farsan* shops, flour mills, laundries, and dyeing and printing. From the point of employment offered hotels, lodging houses, restaurants and manufacture of aerated waters claimed the largest percentage (28·98 per cent) followed by tailoring and *pan-bidi* shops (13·98 per cent and 11·50 per cent) respectively. Other occupations which are important as engaging a sizeable number, more than 6 and less than 10 per cent, are in order goldsmiths, sweets and *farsan* shops, dyeing and printing, and cycle repairing. These statistics further reveal that the owners of establishments other than those keeping hotels, lodging houses and restaurants, did not engage women and children.

Bakery—There were 11 bakery shops employing 32 persons in the city of Jamnagar in the year 1966. The survey disclosed that these were mainly proprietory concerns and were more or less dispersed in different localities of the town. The daily gross turnover varied from Rs. 100 to 600 depending upon the size of establishments. The high turnover of bakeries is also due to the location of the defence establishments in Jamnagar city which require bakery products in large quantities for consumption by the defence personnel. Owners of bakery shops of the city have since 1958 formed themselves into an association called the Jamnagar Bakery Association for looking after the interests of its members.

Hotels, Lodging Houses, Restaurants and Manufacture of Aerated Waters—According to the information furnished by the Jamnagar Borough Municipality these establishments numbered 271, employing 829 persons in the year 1966 including 39 women and 28 children. Of these, establishments like hotels and restaurants, those manufacturing aerated waters like soda, lemon, etc., were by far the largest and accounted for 255 and 598 workers. These establishments were mostly managed by the owners themselves, the bigger among them employing salaried managers to run them. It was also found that most of them were housed in rented premises. The average monthly gross turnover of an individual hotel and restaurant ranged between Rs. 6,000 to 14,000 depending upon its size, that of the lodging and boarding house from Rs. 5,000 to 12,000 while in the case of manufacturer of aerated waters it ranged between Rs. 600 and 1,200. The Jamnagar Hotel Owners' Association, the Jamnagar Lodging and Boarding Association and the Jamnagar Cold-drink House Mandal function in the city for the benefit of their members.

Sweetmeat and Farsan—There were 91 establishments which employed a total of 193 persons in 1966. It was found that the business of these concerns was more or less seasonal and was reported to be brisk during the marriage season and festivals like Diwali. The gross monthly income of an individual establishment varied from Rs. 2,500 to 11,000 depending upon whether the unit is small or large. The Jamnagar *Mithai Farsan* Association has been functioning since 1960 to look after the interests of its members.

Pan-bidi—There were 280 *pan-bidi* shops in the city of Jamnagar which employed 329 persons in 1966. The survey showed that these shops were run largely on proprietorship basis. Most of these shops kept and sold additional items like perfumery, cigarettes, confectionery, wax candles, aerated waters, and such sundry articles as well. They were mostly housed in rented premises. The gross monthly earnings of these establishments varied from Rs. 350 to 1,100 depending upon their size and custom. There was no association of the owners of *pan-bidi* shops in the city.

Hair-cutting—There were 131 hair-cutting saloons in the city of Jamnagar, employing 166 persons in the year 1966. These establishments were scattered all over the city and were mostly proprietory concerns. It was found that a majority of them were housed in rented premises paying monthly rent ranging from Rs. 10 to 40. Their gross monthly earnings were reported to vary from Rs. 300 to 500. Larger concerns employed salaried workers. The Jamnagar Hair-Cutting Saloons Association established since 1962-63 looks after the interests of its members.

Goldsmithy—The number of establishments engaged in the making and selling of gold and silver ornaments was 206 employing 245 persons in 1966. It was found that a majority of establishments were housed in rented premises for which a monthly rent ranging from Rs. 20 to 35 was paid. Their gross monthly earnings varied from Rs. 1,000 to 3,000. Their business is naturally brisk during the marriage season, though it has been adversely affected on account of the promulgation by the Government of India of the Gold Control Order in 1963.

Tailoring—284 tailoring units in the city, employed 400 persons in 1966 A majority of them are one-man establishments wherein family members or relatives of tailors are also engaged in such minor work as fixing of buttons, repairing of garments, etc. Large concerns employed outside workers. Most of the establishments are housed in rented premises, for which the rent paid varied from Rs. 15 to 40 per month. Gross monthly income was reported to vary from Rs. 250 to 1,200 depending upon the size of the tailoring establishments. They had no association.

Cycle Repairing—The number of establishments engaged in repairing and servicing of cycles was 110 employing 173 persons in 1966. The large number of such concerns in the city accounts for the increasing use of bicycles in recent times. Some of the larger concerns besides attending to repairs also sold bicycles to customers. It was also found that most of the concerns were housed in rented premises for which monthly rent ranging between Rs 25 and Rs. 75 was paid The gross monthly earning of establishments carrying out repairs varied from Rs. 300 to 500, whereas income of those that sold bicycles earned Rs. 5,000 and more. The Jamnagar Taxi-Cycle Association was established in 1966 to look after the interests of its members

PRICES

A study of the general level of prices and their trends is very useful in understanding the economic condition of the people. For. it is not the money income but purchases made therefrom that matter so much. Prices not only indicate the movement over time taking place within the economy of a district, but also show their effect for good or bad on the community by

indicating changes in the level of economic activity by which all sections of society are influenced.

While examining the price movements in the district it will be convenient to consider them for the following periods.

1. 19th century
2. 1901 to 1914
3. From the First World War to the Great Depression (1914 to 1929)
4. The Great Depression and recovery (1929 to 1939)
5. The Second World War and after (1939 to 1947)
6. Post-Independence period

Price trends during the different periods are reviewed below in brief.

Prices of important agricultural commodities compared below for the years 1843-44 and 1876-77 show that the 19th century was characterised by a general rise in prices.

Prices of Important Foodgrains during 1843-44 and 1876-77

Name of produce	Number of pounds sold per rupee *		Name of produce	Number of pound sold per rupee*	
	1843-44	1876-77		1843-44	1876-77
1	2	3	1	2	3
Bajri	68	32	Rice .. .	20	13
Jowar	70	27	Pulse (*dal*) ..	28	20
Wheat .	110	40	Cotton (cleaned) ..	5	5
Gram	97	36	Tabacco .	9	5

*Pound is approximately equivalent to 0.45 kg

Source .

WATSON, J. W., *Statistical Account of Navanagar Being the Navanagar Contribution to the Kathiawar Portion of the Bombay Gazetteer*, 1879. p. 16

A comparison of prices ruling the market between 1843-44 and 1876-77 reveals a steadily rising trend. A rupee which could purchase 68 lbs. of *bajri* in 1843-44 could do 32 lbs. in 1876-77. The prices of *jowar* and wheat rose from 70 to 27 lbs. a rupee and 110 to 40 lbs. respectively for the same period. A similar rise was also registered by other foodgrains and pulses.

In the beginning of the 20th century the prices though higher than what they were during the preceding century did not show wide fluctuations

before the First World War and were within limits steady as can be seen from the following table.

Prices of Important Foodgrains, 1907 to 1912-13

(SEERS OF 40 TOLAS* PER RUPEE)

Name of the commodity	Year 1907-08	1912-13
1	2	3
Bajri	20	22.1
Wheat . . .	21.3	22.9
Mug	26.7	22.9
Gram	23.5	22.9
Rice (depending on quality) ..	8.4 to 16	9 to 12

*A seer of 40 tolas is approximately equivalent to 0.45 kg.

Source :

Administration Reports of the Nawanagar State

The First World War (1914-18) had a great impact on the economy and spurred the prices to a very marked degree. This was a period in which forces other than local continued to influence the price trends in the district. Prices of important foodgrains during the period 1914-15 to 1918-19 were as follows.

Prices of Important Foodgrains, 1914 to 1918

(SEERS OF 40 TOLAS PER RUPEE)

Name of the commodity	1914-15 (March)	1915-16 (March)	1916-17 (March)	1917-18 (March)	1918-19 (March)
1	2	3	4	5	6
Bajri	20	19	22	14	8
Jowar .	32	22	15	20	8
Wheat	17.8	19	34	14	8
Udid	20	15	22	14	6.5
Mug .	22.1	12	18	14	6.25
Math .	32	20	23	23	8
Gram ..	20	18	32	23	11
Rice .	10 to 17.8	10 to 12.5	7.5 to 15	6 to 11.5	5·25 to 11

Source :

Administration Reports of the Nawanagar State

The table aforesaid discloses a sharp rise in the price of foodgrains during the period 1914-15 to 1918-1919. A rupee that purchased 20 seers (of 40 tolas) of *bajri* in 1914-15 could do only 8 seers in 1918-19. A similar fall in the case of other cereals like *jowar* and wheat from 32 seers to 8 seers, and from 17·8 seers to 8 seers respectively show the rather considerable decline in the purchasing power of rupee.

This abnormal rise in prices except for the year 1916-17 in which there were more favourable rains, may be ascribed to a greater allocation of goods for War purposes, increase in the circulation of money on account of increased Government expenditure and sympathetic rise in prices due to a general rise in world prices.

After the World War, the prices of foodgrains began to ease and did not indicate up to 1925-26 wide fluctuations as the average prices per rupee of some of the important foodgrains prevailing in 1919-20 and 1925-26 show. A downward trend in prices, however, began to manifest itself from 1926-27. Years 1929 to 1939 are important in the history of price fluctuations all the world over as it was a period of depression followed by a recovery. The period witnessed a rapid fall in prices in the district as the rest of the country due to the Great Depression of 1929. The fall in prices, the diminution in the value of trade, mal-adjustment of costs and prices and increase in the burden of contractual obligations were some of the factors responsible for the appearance of this phenomenon during this period. The worst effects of depression began to lessen after 1931-32 and a buoyant swing, which was at first hesitant, began. There was a definite improvement in the level of prices in 1936-37 as shown by the prices per rupee of important foodgrains 23 seers for *bajri*, 12 seers for wheat, 16 seers for *mug*, 23 seers for gram and 16 to 18 seers (depending on quality) for rice.

The declaration of the Second World War in 1939 again led to a rise in prices and the markets evinced an upward trend from 1940-41 onwards as can be seen from the table that follows.

Prices of Important Foodgrains, 1939-40 to 1943-44

(SEERS OF 40 TOLAS PER RUPEE)

Sl. No.	Name of the commodity	1939-40 (March)	1940-41 (March)	1941-42 (March)	1942-43 (March)	1943-44 (March)
1	2	3	4	5	6	7
1	*Bajri*	16	18	15	13	13
2	*Jowar*	20	36	17	15	15
3	Wheat	15	21	12	7	7
4	*Udid*	12	16	12	8	7
5	*Mug*	12	12	10	9	5
6	*Math* ..	14	18	14	16	12
7	Gram	15	20	12	7	6
8	Rice ..	14 to 16	10 to 12	8 to 10	4 to 5	2.5 to 3

Source :

Administration Reports of the Navanagar State

The rise in prices was further accentuated by the tempo of increased industrial activity, scarcity of consumer goods, increase in public demand due to rise in income, inflation, and above all the activities of speculators and

hoarders making the shortage of goods still more acute. As soon as the War began it was realised that the price control would be a vital part of national defence. A price control board consisting of the officials and non-officials was constituted by the Nawanagar State to fix the wholesale and retail prices of the necessaries of life and of other articles to prevent profiteering. Rationing was introduced in Jamnagar city, and in other areas fair price shops were opened. But all these measures failed to arrest the rising trend in prices which caused much misery to the people. The agriculturists in general gained somewhat, but their prosperity was more apparent than real. This upward trend in prices continued unabated even after the Second World War.

In the post-Independence period, prices continued to rise as before till about 1951, but registered a downward trend thereafter leading to the decontrol of food in 1952. Successful implementation of the First Five Year Plan, and good crops were mainly responsible for this decline. But prices since the Second Five Year Plan have shown a persistent upward trend as disclosed by the following table comparing prices of foodgrains between 1959 and 1966.

(PRICES IN RUPEES PER QUINTAL)

Sl. No	Name of the commodity	1959	1966	Sl. No.	Name of the commodity	1959	1966
1	2	3	4	1	2	3	4
1	Rice (Fine)	216.00	N.A.	6	*Jowar* ..	39.98	73,10
2	Rice (Medium)	109.50	200.00	7	*Bajri* ..	41.59	83.35
3	Rice (Inferior)	81.07	N.A.	8	Gram *Dal* ..	47.86	158.75
4	Wheat (Red *katha*)	69.27	76.98	9	*Mug* .	55.31	108.44
5	Wheat (Inferior)	38.67	N.A.	10	*Udid Dal*	81.89	N. A.

N.A. = Not available

Source :

District Statistical Officer, Jamnagar

The highest percentage increase in the principal food crops was recorded in *jowar* and *bajri* which rose respectively from Rs. 41·59 to 83·35 and from Rs. 39·98 to 73·10 per quintal during this period. Increased plan outlay, taxation, consequent on the expansion of development activities, continued inflation, hold-back of stocks to boost prices, failure of rains, inadequacy of available food supplies and other essential commodities, the Indo-Pakistani deadlock and the general rise in world prices are some of the factors responsible for the continued spiral of prices in the country, the State and the district which has foiled all efforts to check them.

Wholesale prices of important agricultural commodities for the period 1959 to 1966 ruling the markets at Jamnagar, Khambhalia and Kalavad for which information is available are given in Statement VIII.11 at the end of the Chapter.

WAGES

Wages usually signify all remunerations paid to a person as payment for the labour done and throw very valuable light on the economic condition of the people. The wage level over a period of time has undergone somewhat similar fluctuations as the price level. In the early days, wages, especially, in the agricultural sector, were determined by custom and tradition. The agricultural labourers and artisans were generally paid either in cash or in kind or in both. The characteristic phenomenon of wages in the later part of the 18th and 19th centuries as in the case of prices was that of a general rise. Trend of wages during the later part of the 18th and 19th centuries till about 1880 paid in the peninsula of Kathiawar which should apply equally well to the areas comprised in Jamnagar district have been reviewed in the *Kathiawar Gazetteer* in the following terms.

"The wages earned by field labourers depend on the time of the year and the character of labour. Field labour is usually paid in kind. For clearing and weeding, men receive three pounds (three *seers*) and women two pounds (two *seers*) of grain a day. Labourers employed in harvesting are paid in kind at the rate of one-twentieth to one-sixteenth of the amount collected. This share is termed the *mul* or original wage. In addition to it the middy meal is provided by the employer. The cotton picker receives one-sixteenth to one-twentieth of the first packing which is termed *Jhungra*, literally a heap or share, one-twelth of the second gathering one-fifth or one-sixth of the third and last picking which is called *jhunjha* or last, a word which is also used for the last child of a family. After the last picking the villagers are allowed to glean the remainder. This gleaning is called *salo* and it is permitted also in grain fields after the crops are carried. In sugarcane and other irrigated fields the workmen are paid in cash from £ 3 12 s to £ 4 16 s. (Rs. 36- Rs. 48) a year and food and clothing in addition. If they are engaged for a shorter term they are paid 8 s. (Rs. 4) a month besides food. but without clothing. Three workmen are required in a sugarcane field, the *panetia* or waterer who guides the water into the furrows, the *kosai* or water-bagman who drives the bullocks which raise the water, and the *bhuria* whose duty is to cut the cane when ripe. The working hours are from six in the morning to six at night with an interval from twelve to two for food and rest. Field-workers who are not engaged by the year, find employment in ploughing, cleaning, weeding and picking. This employment lasts for about nine months. It is calculated that the wages which they earn during this time are sufficient to provide them with the necessaries of life during the whole year. At harvest time the workers are paid far higher wages than any other employer of labour can afford to give. Miscellaneous labourers chiefly belong to four castes. *Bhois* or litter-bearers, *Ghandaria* or coir-rope makers, Kolis, and

Khavas, the offspring of the female servants of chiefs and landlords. These are paid in cash, the daily wages of a man being 3 d. to 4½ d. (2-3 *annas*) and of a woman 2¼ d. to 3 d. (1½-2 *annas*). In mills and cotton presses the wages even of unskilled labour are higher, a man receiving 3¾ d. to 5¼ d. (2½-3½ *annas*) and a woman 3 d. (2 *annas*) a day. Some forms of unskilled labour are paid by the amount of work done. Women who are usually employed to separate the cotton from the pod can clean forty pounds (1 *man*) of cotton in a day and for this they receive 3 d. (2 *annas*) and the pods as fuel. One man can unhusk 750 cocoanuts in a day, for which he is paid at the rate of 2 s. (Re. 1) per thousand. During the cotton season trained workmen in steam presses and ginning factories earn 7½ d. (5 *annas*) and at screw presses as much as 2 s. (Re. 1) a day.

Masons usually belong to the following castes, Kanbis, Kachhia, Rajputs, Khavas, Jogis, Ravalias, and Muhammadans. Their wages vary according to their skill. The best hands earn as much as £ 1 12 s. (Rs. 16) a month, an average mason makes about £ 1. 5 s. (Rs. 12½) and inexperienced workman not more than 14 s. (Rs. 7). An average carpenter makes 15 s. to £ 1 5 s. (Rs 7½-Rs. 12½) a month, while a skillful workman may command as much £ 1 10 s. (Rs. 15). *Suthars* have not the monopoly of carpentering. *Kumbhars*, *Lohars* and *Darjis* freely compete with them. Blacksmiths are usually employed by large establishments who pay them £ 1 10 s. to £ 2 (Rs. 15-Rs. 20) a month. A few work on their own account making betelnut—scissors and native cooking vessels. Stone cutters belong to any caste. They make £ 1 18 s. to £ 2 (Rs. 19-20) or even as much as £ 2 4 s. (Rs. 22) a month. The class of stone-cutters called *sompura Salats* are considered specially good workmen and earn as much as £ 2 10 s. (Rs. 25) a month, except among *Lohars* or blacksmiths whose sons blow the bellows, the women and children of skilled craftsmen do not help the men. These different classes of skilled labourers are mostly Hindus. They begin work at seven in the morning and go on till six in the evening with an interval for dinner and rest between twelve and two. They are paid in cash. The wages of skilled labour have risen considerably within the last twenty years : those of carpenters from 6 d. (4 *annas*) in 1860 to 1 s. (8 *annas*) in 1881, of bricklayers, smiths, tailors, and shoemakers from 6 d. (4 *annas*) in 1860 to 9 d. (6 *annas*) in 1881 ; of masons and sawyers from 7½ d. (5 *annas*) in 1860 to 1 s. (8 *annas*) in 1881. During the same time the wages of unskilled labour have risen from 3 d. (2 *annas*) to 4½ d. (3 *annas*)."[1]

1. CAMPBELL, J. M., *Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar*, pp. 214-216, 1884

Wages of certain categories of workers in Nawanagar for the years 1843-44 and 1876-77 as given in the *Statistical Account of Nawanagar* are reproduced below.

Average Daily Wages to Labourers in 1843-44 and 1876-77

(IN ANNAS)

Classes of labourers	1843-44	1876-77
1	2	3
Masons	4½	10
Sawyers	4½	10
Bricklayers	4½	10
Carpenters	6	12
Labourers	1½	5

Source :

WATSON, J. W., *Statistical Account of Nawanagar being the Nawanagar Contribution to the Kathiawar Portion of the Bombay Gazetteer*, 1879 p. 16

These figures illustrate that wages both for skilled as well as unskilled labour rose in the same manner as the prices of important foodgrains. During the subsequent period wages continued to manifest a general upward trend. The increase in wages was due to the general rise in the cost of living.

This was the condition prevalent in good old days when the economic structure was quite simple. The complexity of modern times has considerably influenced alike the level of prices and wages which have registered an abnormal rise in recent times. During 1949-50 the daily farm wage rates in the (Halar) district were :

Workers	*Daily wages** Rs.	As.	Ps.
Male	1	10	4
Female	1	5	3
Childern	1	0	0
Average daily wages	1	8	8

* The former currency was in rupees, annas and pies. 12 pies made an anna which was 1/16th of the rupee. The present decimal currency is in rupees and paise. 6 paise are equivalent to an anna of the old currency.

Source :

VAKIL, C. N., and LAKDAWALA, D. T., *Economic Survey of Saurashtra*, p.175, 1953

After the integration of Saurashtra State into the Bombay State on 1st November, 1956, agricultural labour began to be classified according to the Manual of Revenue Accounts, under three categories as (a) skilled, (b) ordinary and (c) field labour to which one more category was added, viz., herdsmen[1] whose main occupation is tending the cattle of the village.

1. *Season and Crop Report*, Gujarat State, 1960-61, Government of Gujarat, 1964, p. 26

The following are the figures of daily agricultural wages in the district during 1960-61 (July to June).

(IN RUPEES)

Sl. No.	Type of labour	Average daily wages
1	2	3
1	Skilled labour	
	(a) Carpenters	5.45
	(b) Blacksmiths	4.98
	(c) Cobblers	4.68
2	Field labour	2.84
3	Other agricultural labour	2.51
4	Herd men	2.00

Source :

Season and Crop Report, Gujarat State, 1960-61, Government of Gujarat, 1964

An exact comparision of the average daily wages of agricultural and other workers prevailing in 1960-61 with those prevailing earlier is not possible on account of the variation in the classification of workers. Nevertheless, it is a well-known fact that there was a steep rise in wages, due to intense economic activity in the district during the successive Five Year Plans, causing corresponding rise in the level of prices of commodities, causing a general rise in the cost of living.

The average daily wages for different categories of workers in Jamnagar city during the period 1963-67 for certain selected months for which figures are available are compared below.

(IN RUPEES)

Sl. No.	Type of labour	February 1963	January 1967
1	2	3	4
1	SKILLED LABOUR		
	(a) Carpenters	5.25	7.00
	(b) Blacksmiths	5.00	7.00
	(c) Cobblers	1.00	6.50
2	FIELD LABOUR		
	(a) Men	4.00	7.00
	(b) Women	2.50	5.50
	(c) Childeren	1.50	2.50
3	OTHER AGRICULTURAL LABOUR		
	(a) Men	2.50	6.50
	(b) Women	2.00	5.00
	(c) Children	1.50	2.00
4	HERDSMEN		
	(a) Men	2.50	N.A.
	(b) Women	2.00	N.A.
	(c) Children	1.50	N.A.

N.A.—Not available

Source :

Gujarat Labour Gazette, published by the Office of the Commissioner of Labour, Gujarat State, Ahmedabad

The general rise in the level of wages during this period seems to have corresponded with the steep rise in prices already noticed before. The foregoing statistics further reveal that the wages of skilled labour registered a proportionately lesser increase than those earned by field and other agricultural labour. Among unskilled labourers the rate of increase was proportionately higher among other agricultural labourers than among field labourers who seem to have been in short supply probably due to the shortage of farm labour caused by the exodus of the village labourers towards towns.

The average daily wages for different categories of agricultural workers for Jamnagar city, Bhanvad, Dhrol, Okhamandal, Jodiya, Kalyanpur and Lalpur for the period 1962-67 (as available) appear in Statement VIII-12 at the end of the Chapter.

Minimum Wages—After the formation of the United State of Saurashtra, the Minimum Wages Act, 1948 was applied to that State also. In pursuance of that Act, the Government of Saurashtra appointed committees to recommend wages for the following industries.

1 Rice, flour and *dal* mills
2 Tobacco manufacturing, *bidi* making
3 Oil-mills
4 Road construction and building operations
5 Stone breaking and stone crushing.

Government also appointed committees to advise it on the fixation of minimum rates of wages of the employees of local authorities and transport companies. On the advice of these committees and in consultation with the Wages Advisory Board, the Government fixed minimum wages in all these industries which were also enforced in the Jamnagar district. The benefits of giving minimum wages to the categories of workers have been gradually extended from time to time by the Government, the details of which are given in Chapter V entitled 'Industries' in the Section on 'Welfare of Industrial Labour'.

STANDARD OF LIVING

The standard of living is a resultant of two factors, viz., the total income that a family earns and the total expenditure incurred for securing the amenities of life for its members. In view of this, a knowledge of the prevalent standard of living of the various strata of society is useful in understanding the general economic and social well-being of the people and planning for their progress and prosperity.

A field study of certain selected families in Jamnagar city and certain selected villages of the district was undertaken in December 1966. Selection of families was done on a representative basis with a view to cover different strata of society. The account that follows is based on the income and expenditure and assets and liabilities of the families surveyed. Personal observations and impressions gathered at the time of survey together with the information obtained from other available sources have also been utilised to supplement the material gathered with a view to present a broad picture of the standard of living of the different classes living in selected villages and the city of Jamnagar.

Urban Sector—The total urban population of the district according to the 1961 Census is 293,658 or 35·4 per cent of the total population. The district has 14 towns. The city of Jamnagar is the largest having a population of 148,572 or 50·59 per cent of the total urban population of the district. It has been selected for urban survey because of its (i) pronounced urban characteristics, (ii) importance as a centre of industries, trade and commerce, and (iii) its position as an educational and administrative centre. For the purposes of investigation, household was taken to be the unit. To get a broad idea of its living conditions the urban society was classified into three income groups, viz., (i) Group I-families having an annual income of Rs 1,500 or less, (ii) Group II-families having an annual income of Rs. 1,501 to 3,000, and (iii) Group III-families having an annual income of Rs. 3,001 and above. In the selection of families care was taken to make the survey as representative as possible by including most of the important occupations in the city The survey covers 49 families in the city.

Lower Income Group : Group-I (Annual Income below Rs. 1,500)—This group represents the lowermost stratum of the urban population and includes within its fold a vast majority of the city dwellers, composed of unskilled and semi-skilled labourers, shop assistance, petty shopkeepers, petty artisans, peons, etc.

17 families were surveyed in this group. The average size of a family in this group was 5 to 6 members and the average annual income per household Rs. 1,148. In many instances employment was not of a permanent character. The average annual expenditure came to Rs. 1,598 showing an average annual deficit of Rs. 450 per family. Bulk of the expenditure, i e., 71·68 per cent of the total was spent on food which was inferior in quality. Green vegetables, milk, sweets, etc., seldom enter their menu. Clothing accounted for 10 95 per cent. After meeting these two requirements there was hardly much left for other items of expenditure. Fuel lighting and housing accounted for 5·70 per cent and 4·64 per cent respectively Miscellaneous expenditure incurred on (a) social occasions, (b) tea, *bidi*, tobacco, etc , which have become as much a necessity of life as food and clothing, (c) education

and (d) entertainments claimed 7·03 per cent. The living of the people in this group can hardly be called comfortable as poverty hardly left them anything to spend on items other than bare necessities of life. Most of the families in this group were in debt and did not have savings worth the name to fall back upon in difficulty. One of the ways adopted for bridging the gap between their meagre earnings and expenditure was to postpone the payment of a part or whole of the bills in turn. An extenuating factor about their indebtedness was that the borrowings from relatives and friends, which represented nearly half the total debt, was generally interest-free. In a few instances money-lenders were resorted to for petty loans, for which a high rate of interest had to be paid. Most of the families did not have property worth the name. Some owned houses either in Jamnagar or in their native places. The housing condition was far from satisfactory. In a majority of cases they resided in single room tenements in congested localities of the city where adequate facilities of ventilations and electricity were lacking. The low level of income of these families came in the way of their having sufficient household equipments, which consisted of a few utensils earthern pots, and cheap miscellaneous belongings. The level of literacy among these people was very low. With a view to encourage education among the economically backward classes, Government gives certain concessions by exempting them from paying (a) full tuition fees in schools if their guardian's annual income is up to Rs. 1,200 and (b) half the tuition fees if their guardian's annual income is between Rs. 1,201 and Rs. 1,800. Payment of full fees are exempted in colleges, if the guardian's annual income is up to Rs. 900. Due to these concessions the level of literacy in this class has, of late, begun to rise.

Middle Income Group : Group II (Annual income between Rs. 1,501 and 3,000) -This group represents what may commonly be termed as middle income class. It is composed of semi skilled and skilled workers, school teachers, clerks, small traders, mechanics, bus conductors and drivers, petty shopkeepers, etc., and others self-employed in small or independent vocations.

22 families from his income group were surveyed. The average size of the family was 5 to 6 members, and the average annual income per household came to Rs. 2,120. Though the total earnings of such families were not much, their economic condition was appreciably better as compared to the previous income group. The average annual expenditure came to Rs 2,199 showing an average deficit of Rs. 79 per family. The pattern of expenditure of this group was not very much different from that of the previous income group. On an average, 72 70 per cent of the total expenditure was spent on food alone It incurred comparatively greater expenditure on milk, *ghee*, edible oil, vegetables, spices, etc. Clothing claimed 8·79 per cent and was a little costlier as in some cases, it consisted of modern varieties like terylene, nylon, woollen, etc. Expenditure on fuel and housing accounted for 6·58 per cent and 3 88 per cent miscellaneous expenditure 8·05 per cent. These

variations partially reflect a higher social status of this class that called for greater expenditure on social and religious occasions, education, medical treatment, travelling, entertainment, etc., indicate to some extent their ability to spend a little more on such items. The economic condition of this class is appreciably affected by rising prices owing to false notions about their social status which prevents their womenfolk and children from employment in gainful pursuits augment the family income. In a majority of cases the expenditure exceeded the income. The deficit had to be met by sale of ornaments or by disposing of property and/or by incurring debt. Loans were taken from relatives and friends who constitute the chief source of borrowing. These were generally interest-free. Other sources were banks, Government and money-lenders. Much of the debt was incurred for productive purposes such as investments in business and education and the rest for maintenance, marriage, medical treatment, etc. Salary earners could make some compulsory saving by way of contribution to provident fund, insurance premia, etc. A few who had surplus budgets held their savings, in savings certificates, shares, bank deposits or other assets. A majority of families lived in houses having on an average 2 to 3 rooms. The sanitary conditions and ventilations were not unsatisfactory. Some owned houses. Their household equipments consisted of metal utensils, three or four pairs of clothing per member, bedding, some pieces of furniture like chairs and a table, wristwatch, bicycle, etc. Most of them were found to possess some gold and silver ornaments. A few also had domestic animals such as goats, cows, hens, etc. Some families employed domestic servants usually working part-time. Literacy in this group was quite marked and the standard of education was higher than that prevailing in the previous income group. The number of persons reported to have received secondary education was relatively larger and those who had taken higher education were appreciable.

Upper Income Group : Group-III (Annual income above Rs. 3,000)— This group is composed of Government servants of the higher grade, college lecturers, proprietors of industrial establishments, merchants, technicians, medical practitioners, pleaders, etc., who were economically well off and led a fairly comfortable life.

10 families from this group were surveyed. The average size of a family was 7 members and the average annual income per household was estimated at Rs. 9,125 and the annual expenditure at Rs. 8,080 showing on an average an annual saving of Rs. 1,045. A majority of the families in this group had either balanced or surplus budgets. With an increased income the percentage expenditure on articles of comfort and luxury had shown an upward trend. 55·57 per cent of the total expenditure was spent on food. Expenditure on milk, *ghee*, edible oils, vegetables, eggs, mutton, sugar, etc., was fairly high. That on clothing accounted for 14·43 per cent. This standard of clothing differed widely in quality, fashion and usage and was superior in quality

and texture to that used by the other two groups. Expenditure on fuel and housing accounted for 5·92 per cent and 6·77 per cent respectively. Miscellaneous expenditure went up to 17·31 per cent revealing a desire to live a comparatively better life. This class can be easily distinguished from others by the type of houses in which such people live and the extent of their household equipments. Many owned houses and others resided either in quarters provided by their employers, or in rented premises. The average number of rooms varied from 3 to 5. Many houses were built of stone and bricks, and quite a few were of modern style. Equipped with separate bathrooms and lavatory, their sanitation and ventilation were quite satisfactory. A few families incurred debts, usually for investment in business and capital expenditure as also for providing education, medical treatment, or meeting social and religious obligations, etc. Important sources of finance were banks, friends, relatives, and Government. This group had considerable assets in the form of owned buildings, movables like ornaments, shares and securities, furniture, woollen, silk and terylene clothings, and articles of comfort and luxury. Most of the families possessed radio sets, bicycles, watches, electric fans, electric irons, etc. A few also owned cars. Most of them employed domestic servants. Literacy in this group was very high. While a majority of members had received primary and secondary education, those who had received collegiate and technical education were many.

Rural Sector—Because of their predominantly agricultural character, the occupational structure, levels of income, expenditure pattern and the cost of living in rural areas differ from those found in the urban areas. The assessment of the standard of living in the rural areas is beset with several difficulties. The first and foremost is the difficulty of gauging fully the economic significance of the barter transactions. Secondly, those engaged in agriculture often supplement their income either by following some ancillary occupations and/or by getting financial help from the members of the household employed in urban areas. Thirdly, majority of people living in the rural areas being cultivators, consume foodgrains they produce. Since artisans and field labourers receive their remuneration also in kind, correct assessment of their income and expenditure becomes rather difficult. The ignorance and hesitancy on their part to give correct information are another handicaps. Against such a background an attempt has been made to give a broad and representative picture of the living standard of the countryside. For the purpose of this study, the various categories of rural households were classified into the following groups.

(i) Agriculturists were divided into 3 categories according to the size of their holding and income, viz., small, medium, and large, (ii) Agricultural labourers, (iii) Village artisans, (iv) Miscellaneous occupations like grocers, retail traders, teachers, ayurvedic practitioners, cattle breeders, Government employees and salaried people.

(i) *Agriculturists*—The size of land holdings and the number of land-holders provide useful data for the study of agrarian problems in the district. The number of holders and the area of land held by them in various size groups in 1961 are given in the following table.

Size of land holdings, 1961

Size of holding (in acres)	No. of holders	Percentage to total holders	Area held (in acres)	Percentage to total area held
1	2	3	4	5
Total	**62,819**	**100.0**	**1,272,705.25**	**100.0**
0.5	6,922	10.9	30,703·04	2·4
6.25	35,945	56·8	518,912.10	40·8
Over 25	20,440	32.3	723,090·11	56·8

Source :
District Census Handbook 1961, Jamnagar

In the size group 0-5 acres there were 6,922 or 10·9 per cent of the holders of land who held 2·4 per cent of total area, while the size group 6-25 acres claimed 35,945 holders or 56·8 per cent of holders and 40·8 per cent of land. The economic holding determined for the different areas comprising this district is 32 to 40 acres. In view of this, 20,440 or 32·3 per cent of holders, who held 56·8 per cent of the total area, may generally be considered to be possessing economic holdings.

(a) *Small Cultivators*—This class of small cultivators forming the lowest stratum of landholders holding less than 5 acres constituted 10·9 per cent of the total landholders. 13 families from this group were surveyed and it was found that each of these landholders held on an average 2·10 acres of land. They for the most part pursued a crop pattern that indicated a cereal economy. There was a considerable amount of under employment coupled with periods of enforced idleness as their small holdings could not provide adequate employment all the year round. The average size of a family in this group was 5 persons and the average number of earners per family was two, one of them being a female. The annual income of a household was estimated at Rs. 1,635 mostly derived from farming and supplemented in some cases by other sources such as agriculture labour, animal husbandry, etc. Their standard of living was very low because of their meagre earnings from sub-economic holdings. The annual average expenditure per family came to Rs. 1,956 showing an annual deficit of Rs. 321. Most of the families had deficit budgets. They had, therefore, to incur debts to bridge the gap between income and expenditure. About 69·33 per cent of the total expenditure was spent on food. Milk, vegetables, etc., did not form important and regular items of their food. Other requirements like clothing, fuel (including

lighting), and housing accounted for 16·56 per cent, 4·30 per cent and 0·61 per cent respectively. Miscellaneous expenditure accounted for 9·29 per cent and was mostly incurred on social occasions, after tea, *bidis*, tobacco, etc., and sometime for medical treatment. Besides landed property most of the families owned a house which was generally a tiny structure built with mud or unburnt bricks, covered with thatched roof or *deshi* tiles. Most of the families also possessed a bullock or two and one or two other cattle. Their other assets included a few silver ornaments, miscellaneous domestic articles and farm equipments. Families that possessed a cart were very few.

(b) *Medium Cultivators*—The agricultural middle class formed 56·8 per cent of the total landholders in the district, 15 families were surveyed in this group. It was found that each landholder on an average held 16·20 acres of land. The average size of a family was 8 persons and the average number of earners per family 2 to 3. Family members helped the household in carrying out various agricultural operations and looked after the livestock of the family. The average annual income of a family came to Rs. 2,831. The main source of their income was farming in which cash crops were important. Livestock provided a subsidiary source of income to some. Their earning were influenced by sharp fluctuations in prices. A little change by way of rise in food prices or in cash crop was immediately reflected in the improvement or otherwise of their economic condition, which was, on the whole, fairly satisfactory. The annual average expenditure of a family came to Rs. 2,700 showing an annual surplus of Rs. 131. Of the families surveyed a few showed surplus budgets, while the rest had deficit budgets. Debts were incurred for productive as well as unproductive purposes. More than half the debt was for the improvement of agriculture and the rest a social and religious purposes, medical treatment, education, etc. The main sources of credit were relatives, friends, co-operative societies and Land Development Bank. The expenditure pattern of this group showed that 60·44 per cent of the total expenditure was incurred on food. Consumption of milk, *ghee* etc., and occasional use of vegetables was fairly good. Clothing accounted for 18·22 per cent owing to their comparatively better economic condition. Expenditure on fuel and lighting and housing accounted for 4·00 per cent and 0·45 per cent respectively. Miscellaneous expenditure incurred on social occasions, medical treatment, education, entertainment, etc., claimed 18·89 per cent. The position as regards assets was not unsatisfactory. A majority of them live in their own houses and some had more than one house. Houses were generally spacious. Other assets included on an average 7 to 8 animals, consisting mainly of bullocks, buffaloes, cows, calves and agricultural implements. Most of them also had a cart and semi-liquid assets in the form of gold and silver ornaments.

(c) *Large Cultivators*—This class form the top stratum of the village community. It includes big landholders holding more than 25 acres of land.

and those whose annual earning exceeded Rs. 3,000. The landholders falling in this class constituted 32·3 per cent of the total landholders of the district. The survey covered 13 families. It was found that each landholder on an average held 37·00 acres. The economic condition of this group was very good. The average number of members in such a family was 10 and the averages number of earners per family 3. A majority of them employed hired labour to supplement family labour because of their large holdings. The average annual income of a family came to Rs. 6,496. The principal source of income was agriculture, in which cash crops had a very important role. Some families also derived income from other sources like sale of cattle produce, interest on money advanced or investments made, etc. The average expenditure per family came to Rs. 4,884 showing an annual surplus of Rs. 1,612. Many families in this group were able to save regularly. In several cases such savings were invested in profitable investments like bank deposits, securities, insurance premia, money-lending or in the form of precious metals and ornaments or even cash. In many cases investment was made for land improvement, digging of wells for irrigation, etc. Loans were usually taken for productive purposes. Expenditure on food could not be precisely calculated in terms of money, since most of their requirements for cereals, pulses, milk, *ghee*, vegetables, etc., were met from their own produce. A family in this group incurred on an average 62·41 per cent of its total expenditure on food. Besides cereals and pulses, consumption of milk, *ghee*, vegetables, etc., was fairly high. The average annual expenditure on clothing and miscellaneous expenditure accounted for 21·13 per cent and 13·27 per cent respectively. Relatively large expenditure on these two items reflected the better economic condition of this class which enabled them to provide for comforts befitting their income and social status. Lavish and wasteful expenditure incurred on social occasions sometimes consumed a considerable portion of their accumulated savings. Expenditure on fuel (including lighting) was 3·19 per cent. Most of the families in this group had two to three houses. On an average each family had 12 animals consisting of bullocks, cows, buffaloes, calves etc. Some kept a mare or horse. Besides the usual agricultural equipments, many of the cultivators had oil-engines for irrigation purposes. Their household equipments were adequate for a comfortable living. Use of brass and metal utensils, furniture and other articles of luxury like watches, etc., was common. All the families had gold and silver ornaments.

(ii) *Agricultural Labourers*—An agricultural labourer's family generally consisted of about 4 to 5 persons. The employment they get is more or less seasonal in character, dependent upon the nature of the monsoon. Grown up boys and girls and even the female members help the head of the family in earning their bread. Agricultural labourers received wages in cash and kind. Their money income had, therefore, to be estimated, which on an average varied from Rs. 600 to 1,200 per annum. With such a limited income

it was but natural that most of the families were not in a position to satisfy even their basic requirements and consequently suffered from malnutrition and heavy indebtedness. They lived in huts or small houses where sanitation was bad and ventilation poor. Some of them were provided free lodging by their employers. Their clothing was coarse and poor. The barest minimum of traditional ornaments worn by married women was of brass or tin, and in some cases of silver. The families did not have other valuables worth the name. Their household equipment consisted of a few earthen utensils besides a wooden cot or two used for sitting and sleeping. The chief implements owned by them was one or two sickles. Some had milch cattle like a goat or a cow.

(iii) *Village Artisans*—Village artisans form an important section of the village community and provide miscellaneous services to it. The main categories included in this class are *suthar* (carpenter), *lohar* (blacksmith), *mochi* (cobbler), *darji* (tailor), *valand* (barber), etc. The average size of family was 6 persons, and the average number of earners per family was 2. Most of the members of this class follow their hereditary profession. The period of employment was not continuous all the year round. The total number of working days in a year did not exceed 200 and for the remaining part they remained unemployed or under-employed when they had to fall back upon the only alternative of hiring out their labour for agricultural purposes. They received part payment for their services in the form of food-grains from the farmers. The average annual income of a family was Rs. 1,936. Economically carpenters were better off than other artisans. The average annual expenditure of a family came to Rs. 2,196 showing a deficit of Rs. 260. The level of income of this class in many cases was barely sufficient to make both ends meet. Many families were in debt, which was usually incurred for unproductive purposes like maintenance, sickness, social occasions, etc. Relatives, friends and co-operative societies constituted their main source of credit. About 70 per cent of the artisans owned houses. A few of them owned some land also. Ornaments constituted the chief semi liquid assets they possessed. Articles of ordinary domestic use were neither in plenty nor in short supply. Some of them kept milch cattle like goat, cows or a buffalo. Many had a bicycle.

(iv) *Other Classes*—Besides the classes mentioned above there were others in rural areas engaged in various other occupations that can be broadly dealt with under main heads of (a) traders and (b) salaried persons.

(a) *Traders*—Traders represent a distinct social group. The volume of their business varies largely according to the population and economic condition of the peasantry inhabiting the village. While at one end of the scale was the tiny village grocer whose monthly business turnover was about Rs. 250 at the other end were those fortunate ones whose turnover was

comparable to that of an urban trader. The typical village trader was often a trinity of seller, buyer, and money-lender. The agricultural bias of the rural economy has been largely responsible for this unique combination of functions. As a money-lender he lent money to cultivators for agricultural purposes, as well as for meeting his day-to-day needs. He realised the sum lent from the cultivators at the harvest time mostly in kind. The annual income of a trader ranged between Rs. 1,800 and Rs. 3,000. Income and expenditure more or less balanced each other without leaving much margin for extra expenditure and comforts and other contingencies. Most of the families lived in their own houses.

(b) *Salaried People*—This group includes such persons as school teachers, petty Government servants, village level functionaries, Ayurvedic practioners, etc. The average annual income of a family came to about Rs. 1,500. Many of them had a deficit budget. However, there was one noteworthy feature, viz., that on account of the fixity of income such people had by long usage so adjusted their expenditure to income that the indebtedness was less marked than in the case of others. As many of salaried persons came from outside they lived either in rented quarters, or rent-free quarters, provided by their employers.

General Remarks—The preceding analysis of the family budgets in different income groups in Jamnagar city as well as in the rural areas of the district gives, though not in strictly accurate statistical terms, a broad and representative picture of the level of living obtaining in these areas. An uneven distribution both in the levels of income of the people as well as in the pattern of their expenditure is discernible especially in urban areas. Expenditure on food is the most important item of expenditure of the families surveyed. It is found that as income increases it is not the expenditure on articles of general consumption that shows an appreciable increase, but the expenditure on clothing, articles of comforts and luxury, educational, medical care, means of entertainments, etc., which shows a corresponding rise. The standard of living of low-income group in the urban area, and the small landholders and the agricultural labourers in the rural areas leave much to be desired, as such people seem to live in rather a precarious condition. The level of living of the middle-income group in the urban areas and medium cultivators in the rural areas has somewhat improved as a result of implementation of various developmental schemes. But the benefit that has accrued to them is set at naught by rising prices that have put greater strain on their budgets. Increased agricultural production and a more favourable atmosphere brought about by tenancy legislations and agrarian reforms have resulted in a definite improvement in the former standard of living of the people both in villages and towns. But it is the large-income group in the urban areas and the large cultivators in the rural areas that have benefitted the most. The standard of living of these groups has improved to a great extent though the housing

condition of the poorer classes still remains unchanged both from the point of space, ventilation and sanitation. A distinct tendency towards improved and well built houses is clearly visible in the houses newly constructed in rural and urban areas. Wasteful expenditure on social occasions like marriage, death, etc., still continue to act as a permanent drag on the improvement of their material prosperity. There is on the whole a better climate for improving the standard of living of the people due to increased opportunities created by the various schemes of development implemented during each successive Five Year Plan.

General Level of Employment

In the review of economic resources an important factor that has to be taken into account is the utilisation of human resources, as determined by its working force, in the different economic activities. A study of changes in their distribution in different sectors of economy is helpful in the assessment of progress made in various sectors.

The following statement gives the percentage distribution of working force in different sectors between 1951 and 1961, as disclosed by the two censuses.

STATEMENT VIII.13

Percentage Distribution of Working Force by Sector between 1951 and 1961

Primary Sector

Total		As cultivator		As agricultural labourer		In mining, quarrying, livestock, forestry, fishing, hunting and plantations, orchards and allied activities	
1951	1961	1951	1961	1951	1961	1951	1961
65.24	62.29	38.72	53.76	19.53	6.24	6.99	2.29

Secondary Sector

Total		At household industry, and in manufacturing other than household industry		In construction	
1951	1961	1951	1961	1951	1961
11.72	16.38	11.00	15.16	0.72	1.22

Tertiary Sector

Total		In trade and commerce		In transport, storage and communications		In other services	
1951	1961	1951	1961	1951	1961	1951	1961
23.04	21.33	7.10	5.67	2.51	3.08	13.43	12.58

Source:

Census of India 1961, Vol.V, Gujarat, Part-I-A(iii), *General Report on the Census, Economic Trends and Projections.*

It can be seen from the above statement that the largest percentage of working force has continued to be employed in the primary sector, and that too in the cultivation of land. The percentage of total workers engaged in this sector has declined during the decade 1951-61 owing to a rapid expansion of the secondary sector. Workers engaged in cultivation have increased from 38·72 per cent in 1951 to 53·76 per cent in 1961, whereas those employed as agricultural labourers and in animal husbandry, mining, quarrying, forestry, fishery, etc., have decreased from 19·53 per cent to 6·24 per cent and from 6·99 per cent to 2·29 per cent respectively during the same period. Workers in the secondary sector comprising manufacturing and construction work have increased from 11·72 per cent to 16·38 per cent indicating an increasing pace of industrialisation and non-agricultural activities in the district, whereas the percentage of those engaged in the tertiary sector has declined from 23·04 to 21·33 per cent

The following statement gives variations in the employment of the working population in different industrial categories during the decade 1951-61.

STATEMENT VIII.14

Variation in Working Population by Industrial Sectors between 1951-1961

Sectors	District				Gujarat State
	Working population 1951	Working population 1961	Increase or decrease 1951-61	Percentage increase or decrease 1951-61	Percentage increase or decrease 1951-61
1	2	3	4	5	6
All Sectors	**248,390**	**307,375**	**+58,985**	**+23·74**	**+28.91**
Primary Sector	*162,026*	*191,447*	*+29,421*	*+18·16*	*+33.13*
As cultivator	90,167	165,237	+69,070	+71·82	+53·09
As agricultural labourer	48,500	19,161	−29,345	−60·10	+2.17
In mining, quarrying, livestock, forestry, fishing, hunting, and plantations, orchards and allied activities	17,353	7,040	−10,364	−59·38	—55.62
Secondary Sector	*29,127*	*50,360*	*+21,233*	*+72.89*	*+61.07*
At household industry and in manufacturing other than household industry	27,331	46,594	+19,263	+70.48	+61.87
In construction	1,796	3.766	+1,970	+109·68	+79.21
Tertiary Sector	*57,237*	*65,568*	*+8,331*	*+14.56*	*—1.30*
In trade and commerce	17,637	17,437	−200	+1.13	+0·40
In transport, storage and communications	6,248	9,408	+3,220	+51.53	+50.30
In other services	33.352	38,663	+5,311	+15.92	—8.59

Source :

Census of India 1961, Vol. V, Gujarat, Part-I-A (*iii*), *General Report on the Census, Economic Trends and Projections*

The total working force increased from 248,390 in 1951 to 307,375 in 1961 that is to say by 58,985 or 23.74 per cent during the decade. This increase in labour force of the district is seen to be less than that (28·91 per cent) in the State as a whole. The rise in the working force is of the order of 18·16 per cent in the primary sector, 72·89 per cent in the secondary sector, and 14·56 per cent in the tertiary sector. These statistics reflect a more rapid development of the secondary sector in the district, and the corresponding relief experienced by the primary sector. In the primary sector, persons engaged as cultivators have increased by 71·82 per cent due to the implementation of land reforms and tenancy legislations in the district which enabled several workers in other categories to acquire the higher status of a landholder, as witnessed by the corresponding decline in those engaged in agricultural labour (60·49 per cent) and animal husbandry, mining, quarrying, forestry, fishery, etc., (59·38 per cent). In the secondary sector workers engaged in manufacturing industries have increased by 70·48 per cent and those in construction work by 109·68 per cent revealing a spurt in construction activity in this district. In the tertiary sector, those employed in transport, storage and communications have increased by 51·53 per cent as a result of expansion of transport and communications services due to development of roads and increase in transport facilities. Workers engaged in other services have also increased. Trade and commerce, however, show a negligible decline in the number employed.

Employment Status—For studying the employment status of workers, it will be convenient to classify them into those engaged in agricultural, and those engaged in non-agricultural pursuits. Among those engaged in agriculture, the most important status is of self-employed persons working with the help of family labour, the role of retained and attached hired labour being relatively less significant in the existing state of cultivation, which is not yet commercialised and mechanised. The non-agricultural working force may be classified into employer, employee, single worker and family worker. For those engaged in household industry, the employment status has been considered by the 1961 Census under two heads, viz., employees and others. Out of 23,205 persons engaged in household industries in 1961, 729 were returned as employees and 22,476 as others. The proportionate strength of employees in this sector is less because of the household nature of its operation. In non-household industry, trade, business, profession or service, there were 99,772 workers in 1961, of whom 8,601 were returned as employers, 53,024 as employees, 29,385 as single workers, and 8,762 as family workers. An appreciably large number of employers in this sector is accounted for by transport and communication concerns, and establishments employing clerical workers, sales workers, and professional and technical workers. The preponderance of employees in manufacturing industries and small enterprises is also noteworthy. Quite a large number

of single workers on the other hand evidences that there are several crafts and professions wherein scope of large scale operation is very limited.

Employment Exchange—The district Employment Exchange maintains records of persons seeking employment, as also employers making its use, and of vacancies notified to it, with a view to assisting the employment seekers in getting jobs suited to their qualifications, experience, etc., and recommending them to the employers or getting the right type of personnel. These records also enable the Exchange to assess the requirements of professional scientific, technical and skilled workers, the type of personnel in short supply, and the employment opportunities available. From May, 1958 it began also to undertake a periodical collection of information about employment strength, job creations, and vacancies where the right type of personnel was not easily available. After the passing of "The Employment Exchanges (Compulsory Notification of Vacancies) Rules, 1960", establishments in the public and private sectors normally employing 25 or more persons are required to notify their vacancies to the Employment Exchange before recruitment.

The following table gives Employment Exchange statistics of the district for the period 1957-66.

Employment Exchange Statistics, 1957-1966

Year	Number of registration	Number placed in employment	Number on the live register at the end of each period	Number of employers using exchange	Number of vacancies notified
1	2	3	4	5	6
1957	3,380	315	1,142	166	800
1958	5,131	681	1,696	218	1,083
1959	6,923	934	2,577	292	1,981
1960	7,717	1,457	2,993	349	2,107
1961	6,578	1,116	2,390	365	1,978
1962	7,217	1,070	3,045	359	2,076
1963	7,008	824	4,228	356	1,927
1964	5,797	822	3,572	328	1,693
1965	7,679	871	3,812	389	1,920
1966	8,318	772	4,939	367	1,889

Source:

District Employment Officer, Jamnagar

The number of registrations increased from 3,380 in 1957 to 8,318 in 1966, i.e., by 146·1 per cent reflecting the increasing use and utility of the Employment Exchange in the matter of seeking employment and recruitment. The number of persons placed in employment increased between 1957 and 1960, began to decline thereafter, but revived in 1965. There was, however, an overall increase from 315 in 1957 to 772 in 1966 as a result of increasing usefulness of the Exchange in securing employment for the

jobless. The percentage increase in the number of persons employed during 1957-66, was slightly lower than that of persons registered with the Exchange during the same period. The number of persons on the live register of the Exchange and seeking employment also rose from 1,142 in 1957 to 4,939 in 1966. These two phenomena, viz., a lower increase in percentage of number placed in employed as compared to those registered for employment, as also those on the live register, may be taken to reveal a rising trend of unemployment. In other words, the jobs created by various development activities during the Five Year Plan periods do not seem to have been commensurate with the increase in the number of job seekers.

FIVE YEAR PLANS

Planning has been accepted and adopted as an important process for the social and economic advancement of a people. An essential feature of planning is to formulate definite plans and set up targets for the development of the various sectors of economy and to achieve them within the stipulated period of time. In India a comprehensive programme of planned economic development has been undertaken for raising the standard of living of the people, opening up new avenues for a richer and fuller life, and generating self-reliance for a self-sustained growth. With these broad perspectives each successive Five Year Plan had a definite role to play. Plans and projects initiated by the Government of Saurashtra during the First and Second Five Year Plans were continued by the Government of Bombay. The Third Five Year Plan was formulated by the Government of Gujarat after bifurcation of Bombay State into Gujarat and Maharashtra. Since separate statistics of the physical and fundamental achievements for the district are not available, such of them as could be collected are given below with a view to give a broad picture of the results achieved.

STATEMENT VIII.15

Expenditure during the Second and Third Five Year Plans (1956-61 and 1961-66)

		Second Plan		Third Plan	
Sl. No.	Name of the sector	Expenditure (Rs.)	Percentage of total expenditure	Expenditure (Rs.)	Percentage of total expenditure
1	2	3	4	5	6
1	Agricultural production	1,815,659	2.07	3,700,066	10.52
2	Irrigation ..	16,954,570	19.29	12,180,972	34.64
3	Power ..				
4	Co-operation and community development ..	36,597,402	41.64	3,870,933	11.01
5	Panchayats . ..	..	..	71,293	00.20
6	Industries and mining ..	463,015	0.53	59,937	00.17

STATEMENT VIII.15—*contd.*

Sl. No.	Name of the sector	Second Plan Expenditure (Rs.)	Second Plan Percentage of total expenditure	Third Plan Expenditure (Rs.)	Third Plan Percentage of total expenditure
1	2	3	4	5	6
7	Transport and communications ..	7,220,303	8·21	11,148,726	31·70
8	Social services				
	Education ..	3,218,269	3·78	2,804,323	7·98
	Health	13,891,934	15·81	737,403	2·10
	Housing	1,558,010	1·77	121,000	0·34
	Social welfare ..	..	..	183,347	0·52
	Welfare of Backward Classes ..	6,067,976	6·90	283,289	0·81
9	Miscellaneous ..	..	..	4,408	0·01
	Total	**87,887,658**	**100·00**	**35,165,697**	**100·00**

Source:
1. *District Census Handbook* 1961, Jamnagar
2. Collector, Jamnagar
3. District Statistical Officer, Jamnagar

The First Five Year Plan was more or less in the nature of preparing the ground work for various development activities. The Second and Third Plans were quite ambitious. The Second Plan by means of the system of "mixed economy" aimed at lying the foundation of economic progress on a wider front. It also attempted to accelerate the rate of growth and initiate a strategy for achieving long term objectives of development. The Third Plan aimed at increasing the tempo of development to march towards "a self-sustained" economy. The economic development made during each successive Plan reflects the determined efforts of the people and the Government to improve their economic condition and raise the standard of living. The implementation of the Plans has resulted in several physical achievements, as also structural changes lying behind these achievements. In the absence of complete figures of expenditure incurred on some of the important items as panchayats, social welfare, etc., an overall comparison with the Third Plan is not possible. Review of work done during the Second and Third Plan periods in respect of such of the items for which information is available is, therefore, attempted in the paras that follow.

In the Second Five Year Plan the most important sector of expenditure was Co-operation and Community Development (41·64 per cent). Agricultural production and irrigation and power taken together (21·36 per cent), and Health (15·81 per cent). In the Third Five Year Plan, however, Agricultural Production together with Irrigation was the most important sector of expenditure (45·16 per cent) followed by Transport and Communications (31·70 per cent) and Co-operation and Community Development (11·01 per cent).

Expenditure on Agricultural Production was Rs. 1,815,559 during the Second Plan which was more than doubled (Rs. 3,700,066) during the Third

Five Year Plan period, evidencing increased emphasis on food production. Expenditure on Irrigation and Power taken together was Rs. 16,954,570 during the Second Plan period, against Rs. 12,180,972 on Irrigation only in the Third Plan showing greater emphasis on irrigation projects to step up food production. Expenditure on Transport and Communications increased from Rs. 7,220,303 in the Second Plan period to Rs. 11,148,726 during the Third Plan period. Co-operation and Community Development schemes in the Second Plan claimed Rs. 36,597,402, as compared to Rs. 3,870,933 during the Third Plan. Health was another important sector of expenditure in the Second Plan accounting for Rs. 13,891,934. Education received adequate attention in the Second as well as Third Plan periods, when an expenditure of Rs. 3,218,269 and Rs. 2,804,323 respectively was incurred.

Establishment of agricultural farms, starting of seed multiplication centres, distribution of fertilizers, introduction and distribution of improved seeds, starting of a dry farming centre at Khambhalia, working of a Pilot Scheme for intensive cultivation of wheat along with soil conservation measures constitute the important items of work carried out in the district for the development of agriculture and farming during the Five Year Plans. Animal Husbandry was likewise attended to by providing adequate veterinary facilities and improving the breed of livestock. Schemes for the development of fisheries and the catching of pearl-oysters for which Jamnagar waters are famous were also implemented. Area under irrigation was appreciably extended by (1) constructing minor and medium irrigation works, (2) construction of new wells and repairs to old ones and (3) installation of oil-engines and pumps. The utilisation of electric power was simultaneously expanded to meet the growing needs of agriculture and industries. Expansion of co-operative activities helped eliminate the middlemen and considerably reduce the exploitation of the agriculturists at the hands of the village money-lenders. Means of transport and communications were *pari passu* expanded to cope with the increasing demands of agricultural and industrial production and provide greater facilities to the public. The pace of industrialisation was fairly rapid as can be seen from the increase in the number of factories from 98 in 1956 to 142 in 1960 and to 172 in 1964 with a corresponding increase in the small scale units which rose from 70 in 1956 to 117 in 1960 and to 439 in 1964. The development of human resources did not lag behind. Various facilities and social services such as education medical, housing and welfare schemes for the benefit of Scheduled Castes, Scheduled Tribes, and Other Backward Classes, etc. were undertaken by financially helping them in a number of ways, as also by providing various amenities conductive to their welfare.

Community Developemnt Programme—The Community Development Programme is a unique and altogether a fresh and scientific endeavour for an integrated approach to the problems of rural development based on local

initiative and community action and working through representative institutions of the people. Such a programme was first inaugurated in the country on 2nd October, 1952 and in the district on 2nd October, 1953 by starting Community Development Projects at Kalyanpur and Kalavad. At first three types of development blocks known as National Extension Service, Community Development and Post-Intensive Blocks were conceived. They marked the three different phases of development in rural areas. The National Extension Service was a preparatory period during which the area was to be prepared to receive a heavy dose of development during the next stage of intensive community development. The assumption was that thereafter the area would be sufficiently developed and the people educated and conscious enough to keep up by themselves the tempo of progress already achieved during the Community Development stage. Peninsular Gujarat, being comparatively backward, the former Saurashtra Government considered that there may be an unavoidable time-lag before the people could understand and appreciate the objectives of the Community Development Programme. Special efforts were also needed to obliterate the past associations that hindered development and came in the way of an intimate understanding between the people and the Extension Services. In addition, therefore, to the all-India Programme of Community Development, a state scheme of Pre-Extension Service called P. E. S. Blocks, with a skeleton staff, was initiated.

The Planning Commission during 1956-57 appointed the Balwantray Mehta Committee to examine the working of the Community Development Programme and related matters and to recommend measures for improving the quality, tone and content of the programme. In pursuance of the recommendations of this Committee, the existing distinction between the N. E. S stage, Intensive development stage and the post-intensive stage was abolished with effect from 1st April, 1958 and all the blocks under all India Programme except blocks in the C. D. stage which had not completed their three years period on 1st April, 1958 were classified into Stage I and Stage II books with revised financial patterns and periods of operations. The Community Development Blocks on completing Stage I would enter Stage II. Stage I had a 5-year period of operation with a ceiling expenditure of Rs. 12 lakhs. For, as observed by the Committee, "The Intensive Development phase in which people's participation would be promoted as the method of Community Development and Panchayats will be intimately connected with the formulation of the Plans for their respective areas. The degree of success attained during the First Stage will be the evidence of the growth and functioning of self-reliant rural communities, which is the basic objective of the programme." After completing Stage I the blocks will enter Stage II of the programme with a provision of Rs. 5 lakhs for 5 years during which period the process of Community Development will be intensified in its fuller amplitude by greater emphasis on Community Development rather than on Development Programmes as such.

Out of the 4 N. E. S. blocks allotted to Saurashtra by the Government of India, the Kalyanpur block was allotted to Jamnagar district. In addition to the C. D./N. E. S. programme, under the scheme of Taluka Development and Pre-Extension Service Blocks initiated by the Government of Saurashtra, the Jamjodhpur block was started from 1st May, 1954, but was discontinued from April, 1957. At the end of 1964-65 there were 10 development blocks, of which 4 were Stage I blocks at Jamnagar, Khambhalia, Dhrol. and Jodiya, 3 were Stage II blocks at Lalpur, Jamjodhpur, and Bhanvad, and 3 were Post-Stage II blocks at Kalyanpur, Okhamandal and Kalavad. Detailed particulars of the blocks of each stage, number of villages and towns, population covered expenditure incurred, and people's contribution up to 1965-66 are given in the following statement.

STATEMENT VIII.16

Community Development Programme, Jamnagar District, up to 1965-66

Sl. No.	Name of the block	Population (1961)	Area in sq. km. (1961)	No. of villages and towns covered	Date of starting of the block	Total expenditure incurred up to 1965-66	Total people's contribution up to 1965-66 (in cash and in labour)
1	2	3	4	5	6	7	8
	STAGE I BLOCKS						
1	Jamnagar ..	255,970	1,234.1	100	1-4-1956	400,085	98,840
2	Khambhalia* ..	81,972	1 251.8	88	1-4-1956	380,903	14,775
3	Dhrol .	35,310	565.7	42	1-4-1956	463 297	23,772
4	Jodiya ..	61,445	888.6	52	1-4-1956	351,393	20,760
	Total of Stage I Blocks	*434,697*	*3,940.2*	*282*		*1,595,768*	*153,147*
	STAGE II BLOCKS						
5	Lalpur ..	53,045	1,130.0	76	1-4-1953	851,118	461,667
6	Jamjodhpur .	77,586	1,178.7	80	1-4-1954	929,946	422,855
7	Bhanvad ..	58,634	744.9	70	1-4-1955	812,794	137,083
	Total of Stage II Blocks	*189,265*	*3,053.6*	*226*		*2,593,858*	*1,021,605*
	POST STAGE II BLOCKS						
8	Kalyanpur ..	68,033	1,432.0	69	2-10-1953	1,105,898	114,403
9	Okhamandal .	60,595	703.7	47	1-4-1963	735,911	
10	Kalavad ..	74,920	1,282.6	102	1-10-1953	1,015,000	563,391
	Total of Post Stage II Blocks ..	*204,157*	*3,418.3*	*218*		*2,856,809*	*677,884*
	Grand Total ..	**828,419**	**10,412.1**	**726**		**7,049,435**	**1,857,636**

*It is ½ unit Block; the rest are 1 unit Blocks.

Source :

District Development Officer, Jamnagar

Community Development projects include activities like agriculture, minor irrigation, land reclamation and improvement, animal husbandry, health and rural sanitation, education, communication, village and small industries, co-operation, etc. The details about physical achievements up to 31st March, 1966 of the Community Development Blocks are given in Statement VIII.17 at the end of the Chapter.

All the villages of the district have now been covered under this programme. The total expenditure on the various Community Development Projects up to 31st March, 1966, for which figures are available was Rs. 7,049,435. People's contribution in cash and labour for these projects during that period amounted to Rs. 1,857,636 or 26·35 per cent of the total expenditure incurred. The physical progress achieved and expenditure incurred amply illustrate the fact that the Community Development Programme has created in the rural people a growing consciousness of their felt needs and a faith in their own ability to meet them from their own resources made available by the gradual improvement in their economic condition.

TRENDS OF DEVELOPMENT

The economy of a region is for the most part conditioned by the political and social set-up obtaining at a particular period of time. For it is the form of Government which ultimately determines the pace of its development. The autocratic form of Government prevalent in the various states and estates now included in Jamnagar district operated as a great hindrance to the material prosperity of the people. The economic structure then in vogue was predominantly agricultural supplemented by some of the rural crafts operated on a household basis. Even the agricultural condition of the time did not conduce to adoption of improved farming practices under the feudal system of land management prior to Independence. Except in the *khalsa* land of Nawanagar State, the cultivators were mere tenants-at-will who could be evicted at the sweet will of the ruler or the Girasdar The system of crop share whereunder assessment was levied in kind, left the cultivator barely sufficient to maintain himself and his family. Under these conditions, there was neither security of tenure nor fixity of rent. The agriculturists naturally had no incentive to produce more. The first and the foremost step the Government of Saurashtra, therefore, took was to formulate a bold land policy aiming at the introduction of various measures of agrarian reforms. As the result of the implementation of these measures reviewed earlier, the cultivator was enabled to become the occupant of the land held by him on payment of a fixed assessment in cash. The agriculturist who was complaced in the past has fully realised the necessity of improved farming practices which are being extensively adopted with the financial and other aids made available by the Government. The combined effects of all these measures

are noticeable in the substantial increase in the production of food and other crops and general improvement in the economic condition of the agricultural classes.

In the industrial field, the former economic structure wherein household and cottage industries prevailed had started showing some signs of development owing to the active interest taken by some of the Indian States. Various facilities and special concessions were offered for establishing new industries which in the initial stage were restricted to ginning and pressing factories and spinning and weaving in cotton textile mills. Trade and commerce also expanded considerably after the development of ports into modern harbours and the opening of rail links with the hinterland. But the real tempo gathered strength after Independence as a result of a number of measures the Government has been taking for accelerating the pace of industrial development. A number of new industries have come up and those in existence have expanded fairly well. Industries which were formerly operated on household or cottage basis are being mechanised and operate on small scale basis. These trends have opened up new avenues of production and employment by diversification in various branches of industries. Complementary fields like mining and fisheries have also been developed substantially in recent times and hold promise of furthehr development and progress in the near future. In fine, there are vast potentialities for starting a number of new industries in the district based on available resources and raw materials furnished by agriculture and mining, as already seen in detail in Chapter V—Industries under the section on industrial potential.

STATEMENTS

STATEMENT VIII.6

Occupational Classification of Persons, by Sex, at Work Other than Cultivation, 1961

Sl. No.	Category	Total				Urban			Rural		
		Persons	Percentage	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10	11	12
1	Professional, Technical and Related Workers ..	6,227	5.06	5,086	1,141	4,091	3,204	887	2,136	1,882	254
2	Administrative, Executive and Managerial Workers	4,832	3.93	4,698	134	4,060	3,936	124	772	762	10
3	Clerical and Related Workers	8,095	6.58	7,839	256	7,691	7,450	241	404	389	15
4	Sales Workers ..	14,493	11.78	14,079	414	9,660	9,389	271	4,833	4,690	143
5	Farmers, Fishermen, Hunters, Loggers and Related Workers	13,454	10.94	10,898	2,556	2,790	2,122	668	10,664	8,776	1,888
6	Miners, Quarrymen and Related Workers ..	575	0.47	529	46	129	108	21	446	421	25
7	Workers in Transport, Storage and Communication Occupations	8,201	6.67	8,187	14	7,137	7,124	13	1,064	1,063	1
8	Craftsmen, Production, Process Workers and Labourers, not elsewhere classified	57,426	46.70	45,267	12,159	32,208	26,926	5,282	25,218	18 341	6,877
9	Service, Sports and Recreation Workers	9,187	7.47	7,821	1,366	6,655	5,384	1,271	2,532	2,437	95
10	Workers not Classified by Occupation	487	0.40	439	48	15	10	5	472	429	43

Source :
District Census Handbook 1961, Jamnagar

STATEMENT VIII.8

Number of Persons Engaged in Selected Occupations, 1961

Sl. No.	Name of the occupation	Total			Urban			Rural		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10	11
1	Physicians, Surgeons and Dentists	330	306	24	240	216	24	90	90	..
2	Nurses, Pharmacists and other Medical and Health Technicians ..	949	662	287	801	581	220	148	81	67
3	Teachers	3,241	2,483	758	1,976	1,383	593	1,265	1,100	165
	(a) Teachers, University ..	82	77	5	78	73	5	4	4	..
	(b) Teachers, Secondary Schools	321	253	68	310	242	68	11	11	..
	(c) Teachers, Middle and Primary Schools	2,644	2,015	629	1,501	1,013	488	1,143	1,002	141
	(d) Teachers (others) ..	194	138	56	87	55	32	107	83	24
4	Jurists	105	103	2	99	97	2	6	6	..
5	Arts, Letters and Science ..	1,513	1,446	67	888	843	45	625	603	22
	(a) Architects, Engineers, Surveyors . ..	285	285	..	268	268	..	17	17	..
	(b) Biologists, Veterinarians, Agronomists and Related Scientists . ..	12	11	1	4	3	1	8	8	..
	(c) Social Scientists and Related Workers	72	66	6	63	59	4	9	7	2
	(d) Artists, Writers and Related Workers ..	136	131	5	68	66	2	68	65	3
	(e) Draughtsmen and Science and Engineering Technicians, n. e. c.	81	80	1	73	72	1	8	8	..
	(f) Other Professional, Technical and Related Workers (including Ordained and non-Ordained Religious Workers, Astrologers, Palmists and Related Workers, etc.)	927	873	54	412	375	37	515	498	17

STATEMENT VIII.8—*contd.*

Sl. No.	Name of the occupation	Total			Urban			Rural		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10	11
6	Administrators and Executive Officials Government	2,320	2,292	28	1,969	1,949	20	351	'343	..
7	Hawkers, Pedlars and Street Vendors	1,143	1,075	68	1,055	998	57	88	77	11
8	Tailors, Cutters, Furriers and Related Workers	3,201	2,577	624	1,785	1,520	265	1,416	1,057	359
9	Jewellers, Goldsmiths and Silversmiths	1,335	1,329	6	695	695	..	640	634	6
10	Dairy Workers (non-Farm) ..	1,311	581	730	1	1	..	1,310	580	730
11	Millers, Bakers, Brewmasters and Related Food and Beverage Workers	2,827	1,964	863	920	809	111	1,907	1,115	752
12	House-keepers, Cooks, Maids and Related Workers	1,147	480	667	993	380	613	154	100	54
13	Barbers, Hairdressers, Beauticians and Related Workers	1,624	1,624	..	377	377	..	1,247	1,247	..
14	Launderers, Dry Cleaners and Pressers	512	465	47	465	444	41	27	21	6

NOTE : n. e. c.=not elsewhere classified

Source :

District Census Handbook 1961, Jamnagar

STATEMENT VIII.11

Wholesale Prices of Important Agriculture Commodities in Jamnagar District, 1959-66

(PRICES IN RUPEES PER QUINTAL)

Sl. No.	Name of the commodities	1959	1960	1961	1962	1963	1964	1965	1966
1	2	3	4	5	6	7	8	9	10
	JAMNAGAR								
1	Rice (Fine) ..	216.00	154.10	142.84	92.48	92.21	103.81	N. A.	N. A.
2	Rice (Medium)	109.50	82.54	95.19	79.85	78.90	89.41	N. A.	200.00
3	Rice (Inferior) ..	81.07	74.85	67.76	62.95	69.00	79.54	N. A.	N. A.
4	Wheat (Red *katha*)	69.27	55.94	56.15	64.39	58.12	76.50	72.25	76.98
5	Wheat (Inferior)..	38.97	38.96	47.22	54.95	52.21	N. A.	N. A.	N. A.
6	*Jowar* ..	39.98	42.31	44.93	47.49	40.37	50.89	76.29	73.10
7	*Bajri* ..	41.59	52.56	47.54	53.95	48.21	60.94	78.03	83.35
8	Gram *dal* ..	47.86	48.96	57.97	58.04	56.68	82.61	136.02	158.74
9	*Mug* ..	55.31	59.25	61.37	63.06	62.66	110.25	99.04	108.44
10	*Udid dal* ..	81.89	81.42	66.87	64.49	100.61	N. A.	N. A.	N. A.
	KHAMBHALIA								
1	Rice (Fine) ..	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.
2	Rice (Medium) .	80	82	85	88	90	95	N. A.	N. A.
3	Rice (Inferior) ..	65	70	75	70	75	79	N. A.	N. A.
4	Wheat (Red *katha*)	52	54	57	65	68	64	69	76
5	Wheat (Inferior)	46	48	50	55	58	N. A	N. A.	74
6	*Jowar* ..	40	43	45	50	52	54	57	68
7	*Bajri* ..	45	48	52	59	64	67	74	83
8	Gram *dal* ..	54	57	58	65	85	93	129	N. A.
9	*Mug* ..	50	54	56	65	82	90	N. A.	N. A.
10	*Udid dal* ..	61	67	70	72	80	N A.	N. A.	N. A.

N. A.=Not available

Source :
District Statistical Officer, Jamnagar

STATEMENT VIII.11—*contd.*

Sl. No.	Name of the commodities	1959	1960	1961	1962	1963	1964	1965	1966
1	2	3	4	5	6	7	8	9	10
	KALAVAD								
1	Rice (Fine) ..	159.13	164.17	N.A.	90.00	N.A.	109	N.A.	..
2	Rice (Medium) ..	103.31	104.19	N.A.	75.00	N.A.	86	N.A.	..
3	Rice (Inferior) ..	72.75	76.13	64.72	59.65	72.71	84	N.A.	..
4	Wheat (Rod *katha*)	59.29	54.32	51.48	59.76	52.50	69	74	..
5	Wheat (Inferior)..	53.38	38.91	40.20	52.80	61.12	N.A.	N. A.	..
6	*Jowar* ..	41.08	43.93	43.68	45.66	42.16	50	72	..
7	*Bajri* ..	49.44	46.84	53.25	48.00	46.83	58	76	..
8	Gram *dal* ..	50.09	50.70	54.80	53.95	60.00	N.A.	N.A.	..
9	*Mug* ..	53.93	58.74	45.56	57.37	65.16	90	100	..
10	*Udid dal* ..	74.10	81.90	N.A.	60.00	N.A.	N.A.	N.A.	..

STATEMENT VIII.12

Average Daily Wages of Workers for Certain Selected Places of Jamnagar District, 1962-1967

JAMNAGAR CITY

(IN RS.)

Sl. No.	Type of labour	February 1963	August 1964	January 1965	July 1965	February 1966	June 1966	January 1967
1	2	3	4	5	6	7	8	9
1	SKILLED LABOUR							
	(a) Carpenters ..	5.25	7.0	7.0	7.0	7.0	7.0	7.0
	(b) Blacksmiths ..	5.0	8.0	7.50	7.50	7.50	7.0	7.0
	(c) Cobblers ..	4.0	5.0	6.0	6.0	6.50	7.50	6.50
2	FIELD LABOUR							
	(a) Men ..	4.0	2.50	3.50	4.0	5.0	6.50	7.0
	(b) Women ..	2.50	2.0	3.0	3.0	3.0	4.50	5.50
	(c) Children ..	1 50	1.0	1.50	2.0	2.0	..	2.50
3	OTHER AGRICULTURAL LABOUR							
	(a) Men ..	2.50	1.50	5.0	6.0	6.0	6.50	6.50
	(b) Women ..	2.0	1.0	2.50	3.0	3.50	4.50	5.00
	(c) Children .	1.50	0.75	1.75	2.0	2.50	2.50	2.00
4	HERDSMEN							
	(a) Men ..	2.50	..	..	..	..	..	..
	(b) Women ..	2 0	..	..	..	..	..	.
	(c) Children ..	1.50	..	..	..	..	..	..

N. A.=Not available

Source :

Gujarat Labour Gazettes, published by the Office of the Commissioner of Labour, Gujarat State, Ahmedabad

STATEMENT VIII.12—*contd.*

BHANVAD

Sl. No. 1	Type of labour 2	February 1963 3	February 1964 4	June 1964 5	February 1965 6	July 1965 7	February 1966 8	June 1966 9	January 1967 10
1	SKILLED LABOUR								
	(a) Carpenters	N. A.	5.0	5.0	7.0	7.0	7.0	7.0	7.0
	(b) Blacksmiths	N. A.	5.0	5.0	7.50	..	..	7.0	7.0
	(c) Cobblers	N. A.	5.0	5.0	6.0	6.0	6.0	6.0	6.0
2	FIELD LABOUR								
	(a) Men	N. A.	2.0	2.0	3.75	2.50	3.0	5.0	2.50
	(b) Women	N. A.	1.25	1.25	3.50	1.50	1.50	3.0	1.50
	(c) Children	N. A.	1.0	1.0	1.50	1 0	1.0	1.0	1.0
3	OTHER AGRICULTURAL LABOUR								
	(a) Men	N. A.	2.0	2.0	5.50	3.50	4.0	3.0	2.50
	(b) Women	N. A.	1.50	1.25	3.0	1.50	2.0	2.0	1.50
	(c) Children	N. A.	.	..	2.0	..	..	..	.
4	HERDSMEN								
	(a) Men	N. A.	0.75	0.75	..	..	..	..	..
	(b) Women	N. A.	0.75	0.75	..	..	..	..	..
	(c) Children	N. A.	0.75	0.75	..	..	..	..	.

DHROL

Sl. No. 1	Type of labour 2	Nov. 1963 3	Feb. 1964 4	Aug. 1964 5	Feb. 1965 6	July 1965 7	Feb. 1966 8	June 1966 9	Jan. 1967 10
1	SKILLED LABOUR								
	(a) Carpenters	5.0	5.0	4.0	5.0	6.0	5.0	5.0	5.0
	(b) Blacksmiths	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0
	(c) Cobblers ..	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0
2	FIELD LABOUR								
	(a) Men ..	3.0	1.75	3.0	3.00	2.50	3.0	3.0	3.0
	(b) Women ..	1.50	1.25	2.0	1.50	1.50	1.75	2.0	2.0
	(c) Children ..	0.50	0.75	1.0	1.0	1.0	1.0	1.0	1.0
3	OTHER AGRICULTURAL LABOUR								
	(a) Men ..	2.50	2.0	2.0	2.50	2.0	2.0	2.0	2.50
	(b) Women ..	1.50	1.25	1.0	1.25	1.50	1.0	1.25	2.0
	(c) Children ..	..	..	..	..	..	..	..	..
4	HERDSMEN								
	(a) Men ..	..	..	..	..	..	.	..	..
	(b) Women ..	..	..	..	..	..	..	..	..
	(c) Children ..	..	..	..	..	..	..	..	..

STATEMENT VIII.12—*contd.*

OKHAMANDAL

Sl. No. 1	Type of labour 2	Aug. 1962 3	Sept. 1962 4	Feb. 1963 5	Nov. 1964 6	Feb. 1965 7	July 1965 8	Feb. 1966 9	June 1966 10	Jan. 1967 11
1	SKILLED LABOUR									
	(a) Carpenters ..	6.50	6.50	..	6.0	6.0	6.0	6.0	6.0*	6.0
	(b) Blacksmiths ..	6.0	6.0	..	5.0	6.0	6.0	5.0	5.0	5.0
	(c) Cobblers ..	5.0	5.0	..	3.0	5.0	3.0	3.0	3.0	3.0
2	FIELD LABOUR									
	(a) Men ..	5.0	5.0	..	3.0	4.0	3.0	3.0	3.0	3.0
	(b) Women ..	3.0	3.0	..	2.0	3.0	2.0	2.0	2.0	2.0
	(c) Children ..	2.50	2.50	..	1.50	1.0	1.0	1.0	1.0	1.0
3	OTHER AGRICULTURAL LABOUR									
	(a) Men ..	4.0	4.0	..	2.50	..	2.0	2.0	2.0	2.25
	(b) Women ..	3.0	3.0	..	2.0	..	1.50	1.50	1.50	1.75
	(c) Children ..	..	..	..	1.0	..	1.0	1.0	1.0	1.25
4	HERDSMEN									
	(a) Men ..	..	..	..	3.0	.	3.0	3.0	3.0	3.0
	(b) Women ..	..	..	..	2.0	..	2.0	2.0	2.0	2.0
	(c) Children ..	..	..	.	1.0	..	1.0	1.0	1.0	1.25

JODIYA

Sl. No. 1	Type of labour 2	Feb. 1962 3	Aug 1962 4	Feb. 1963 5	Feb. 1964 6	Aug. 1964 7	Feb. 1965 8	July 1965 9	Feb. 1966 10	June 1966 11	Jan. 1967 12
1	SKILLED LABOUR										
	(a) Carpenters	6.0	7.0	5.0	6.0	6.0	6.0	5.50	5.50	6.0	N. A.
	(b) Blacksmiths	5.0	6.0	5.0	6.0	6.0	6.0	5.50	5.50	6.0	N. A.
	(c) Cobblers ..	4.0	5.0	4.0	5.0	5.0	5.0	5.0	4.50	5.0	N. A.
2	FIELD LABOUR										
	(a) Men ..	2.50	2.0	2.50	3.0	3.0	3.0	3.0	3.0	3.0	N. A.
	(b) Women .	2.0	1.50	2.0	2.0	2.0	2.50	2.0	2.0	2.0	N. A.
	(c) Children .	1.50	1.0	1.50	1.25	1.0	2.0	1.50	1.50	1.0	N. A.
3	OTHER AGRICULTURAL LABOUR										
	(a) Men ..	2.0	2.0	2.50	2.50	2.50	2.50	2.50	2.50	2.50	N. A.
	(b) Women ..	2.0	1.50	2.0	1.50	2.0	1.75	1.50	1.50	1.50	N. A.
	(c) Children ..	1.50	1.25	1.50	1.0	1.0	1.0	1.0	1.0	1.0	N. A.
4	HERDSMEN										
	(a) Men ..	2.50	2.0	2.0	3.0	2.0	2.25	2.0	..	2.0	N. A.
	(b) Women .	..	..	..	..	..	..	..	..	2.0	N. A.
	(c) Children ..	..	..	..	..	..	..	..	..	2.0	N. A.

STATEMENT VIII.12—*concld.*

KALYANPUR

Sl. No. 1	Type of labour 2	Feb. 1963 3	Nov. 1963 4	April 1964 5	June 1964 6	Feb. 1965 7	July 1965 8	Feb. 1966 9	June 1966 10	Jan. 1967 11
1	SKILLED LABOUR									
	(a) Carpenters ..	..	6.0	5.0	5.0	7.0	7.0	5.0	5.0	N.A.
	(b) Blacksmiths ..	..	4.0	5.0	5.0	7.0	7.0	5.0	5.0	N.A.
	(c) Cobblers ..	..	3.0	5.0	5.0	5.0	5.0	5.0	5.0	N.A.
2	FIELD LABOUR									
	(a) Men ..	..	1.50	4.50	1.50	3.00	3.0	3.0	3.0	N.A.
	(b) Women .	..	1.0	3.0	0.75	2.50	2.50	2.50	2.50	N.A.
	(c) Children ..	..	0.75	1.50	0.75	1.50	1.50	1.50	1.50	N.A.
3	OTHER AGRICULTURAL LABOUR									
	(a) Men ..	..	2.0	3.0	3.0	4.50	4.50	..	3.00	N.A.
	(b) Women ..	..	2.0	2.0	2.0	3.50	3.50	..	2.50	N.A.
	(c) Children ..	..	..	..	..	1.50	1.50	..	1.50	N.A.
4	HERDSMEN									
	(a) Men ..	..	..	..	..	1.00	1.00	..	..	N.A.
	(b) Women ..	..	..	..	..	1.00	..	..	..	N.A.
	(c) Children ..	..	..	..	..	..	..	..	..	N.A.

LALPUR

Sl. No. 1	Type of labour 2	Nov. 1963 3	May 1964 4	June 1964 5	July 1965 6	Feb. 1966 7	June 1966 8	Jan. 1967 9
1	SKILLED LABOUR							
	(a) Carpenters ..	6.0	4.0	4.0	5.0	5.0	7.0	7.0
	(b) Blacksmiths ..	6.0	4.0	4.0	6.0	6.0	8.0	8.0
	(c) Cobblers ..	6.50	..	..	..	..	..	..
2	FIELD LABOUR							
	(a) Men ..	4.00	2.0	2.0	3.50	3.50	3.0	5.0
	(b) Women ..	3.0	2.0	2.00	2.50	2.50	2.0	3.0
	(c) Children ..	1.50	1.50	1.50	2.50	2.0	1.50	2.0
3	OTHER AGRICULTURAL LABOUR							
	(a) Men .	3.50	4.0	4.00	3.00	3.00	3.00	4.00
	(b) Women ..	2.50	3.0	2.0	2.00	2.00	2.00	3.00
	(c) Children ..	1.50	1.50	1.50	2.00	1.50	1.50	2.00
4	HERDSMEN							
	(a) Men ..	..	2.0	2.0	3.00	2.50	..	..
	(b) Women ..	..	1.50	1.50	2.50	1.50	..	..
	(c) Children ..	..	..	..	2.00	1.00	..	..

STATEMENT VIII.17

Physical Achievements of Community Development Blocks (since their inauguration) up to the end of March, 1966

Sl. No.	Name of the Item	Unit	Achievement
1	2	3	4
I	AGRICULTURE		
	(a) Distribution of improved seeds	Quintals	146,671.34
	(b) Distribution of chemical fertilisers	,,	427,419.68
	(c) Distribution of improved implements .. .	Number	4,868
	(d) Area under Japanese method of paddy cultivation .	Acre	428.67
	(e) Fruit trees planted	Number	104,645
	(f) Agricultural demonstrations held	,,	6,813
II	MINOR IRRIGATION		
	Gross additional area likely to be irrigated by new wells completed	Acres	29,730.41
III	LAND RECLAMATION AND IMPROVEMENT		
	(a) Land reclaimed	,	33,793.58
	(b) Area bunded or terraced		45,900.20
IV	ANIMAL HUSBANDRY		
	(a) Total number of improved breed of animals supplied	Number	227
	(b) Improved breed of birds supplied	,,	1,318
	(c) Animals inoculated and vaccinated	,,	159,629
V	HEALTH AND RURAL SANITATION		
	(a) *Pucca* drains constructed	Km.	7.71
	(b) Drinking water wells constructed	Number	236
	(c) Village latrines constructed	,,	515
VI	EDUCATION		
	(a) New school buildings constructed	,,	109
	(b) Total enrolment in primary and junior basic schools		
	(1) Boys	,,	70,066
	(2) Girls	.	34,858

Source :
District Project Officer, Jamnagar

STATEMENT VIII.17—*concld.*

Sl. No.	Name of the Item	Unit	Achievements
1	2	3	4
VII	SOCIAL EDUCATION		
	(a) Literacy centres started	Number	1,090
	(b) Adults made literate by literacy centres ..	,,	24,793
	(c) Reading rooms / libraries functioning ..	,,	195
	(d) Youth clubs functioning	,,	416
VIII	WOMEN'S PROGRAMME		
	(a) Mahila Samities / Maudals functioning ..	,,	209
	(b) Balmandirs functioning	,,	32
IX	COMMUNICATION		
	(a) *Kachha* roads repaired or constructed ..	Km.	136.15
	(b) Culverts constructed	Number	30
X	VILLAGE AND SMALL INDUSTRIES		
	(a) Training centres organised	Number	13
	(b) Persons trained	,,	331
	(c) Sewing machines distributed	,,	387
XI	CO-OPERATION		
	(a) Primary agricultural and multipurpose co-operative societies	,,	552
	(b) Their membership	,,	61,299
	(c) Other co-operative societies	,,	246
	(d) Their membership	,,	15,862

CHAPTER IX

GENERAL ADMINISTRATION

Public administration, as understood today, was not evolved before Independence when the functions of Government were mostly limited to the management of land and preservation of law and order. Land revenue and police administration were the only important departments in most of the princely areas of Saurashtra under the conditions obtaining there prior to 1947. The machinery of administration, however, differed in different States and estates according to their size, powers of the rulers financial resources of the State and the type or character of the administration. Since the form of Government was essentially monarchial, the ruler was the repository of all powers, civil and criminal.

Halar district into which this district was organised on the formation of the United State of Saurashtra consisted of the princely States and estates of different ranks and gradation such as State, Taluka, Thana, etc., exercising powers and jurisdiction which varied very widely. Among the various units included in this district, Nawanagar State was a first class State with a fairly good system of administration. The administration of the State was carried on by the Diwan under the ruler's direction who was the supreme and final authority in the State. The Diwan was assisted by the Naib Diwan who functioned as General Secretary. The various departmental heads were responsible for their work to the Diwan.[1] All important matters especially those connected with Revenue, Finance and Political matters were referred for orders to the ruler. In 1916, the Secretarial system was introduced with a view to secure efficiency and closer touch with the people. Four Secretaries appointed under the new system were designated as Revenue Secretary. Political Secretary, General Secretary and the Hazur Personal Assistant. Each of them had certain departments under his control, in respect of which he exercised independently the powers of Diwan, referring matters of importance to the ruler for orders. In the year 1919, an advisory body called an Advisory Council, was constituted by the late Jam Saheb Shri Ranjitsinhji to ensure the benefits of good Government to his people and secure their concurrence and good will in all measures adopted for their protection and betterment. The Council consisted of 15 official and 38 non-official members, presided over by the Diwan and represented such interests as agriculture, mercantile community, Girasdars, professional middle class and State Officers. The departments of the State varied in extent and number

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1. *The Administration Report of Nawanagar State* for the year 1915-16, p. 2

according to the size, material resources and the character of the administration of the State and included besides Revenue, Police and Judiciary, such departments as Education, Agriculture, Public Works, etc.

Another unit, Dhrol, being a second class State could not have such an elaborate system of administration because of its small size and limited financial resources. The ruler had full powers to try civil and criminal cases within his territory. He was assisted by Chief Karbhari and a Personal Adviser. Jalia-Dewani was a fifth class State while Dhrafa was only a Thana supervised by an Agency Thandar. The States belonging to Class V exercised some criminal and civil powers. They could inflict rigorous imprisonment up to 2 years and fine to the extent of Rs. 2,000. On civil side they could try cases up to Rs. 5,000. Thanas exercised certain revenue powers only, the judicial and executive authority being exercised by a Thandar appointed by the Political Agent. Okhamandal which formed part of the territory of the Gaekwad was organised into a separate *prant* or division under a special officer called Commissioner before the merger of Baroda into Bombay State. The areas comprising the present Jamnagar district thus presented a variegated picture of administrative set-up and was devoid of any unified system of administration at the time of integration of States.

The Government of Saurashtra which came into existence from 1948 thus faced a difficult task of placing the administrative machinery of the State on a uniform level. Its evolution in the present form may be considered into three distinct phases. During the first phase the entire structure of administration was reorganised on the basis of a district which became a principal unit of administration with intermediate functionaries at taluka and village levels. During the second phase, attempts were made to give a new form to the public administration in order to implement the ideals of a welfare state by making the administrative machinery development oriented and by increasing association of the people in nation-building activities. During the final phase, the administrative set-up was democratised to suit the changing needs of time in tune with the socialistic pattern of society. These phases will now be examined in order.

With the district as the principal unit of administration, the Collector became the key functionary and the main pivot of administration instead of the principal district officer responsible for the collection of land revenue and maintenance of law and order. He had manifold functions to perform. In the administration of land revenue, he was concerned not only with the maintenance of land records, collection of land revenue and administering the provisions of the Land Revenue Code, but also with the implementation of land reforms which were introduced immediately after integration to do away with numerous land tenures, levies and perquisites which

hampered the progress of the peasantry. As there was complete separation of judiciary from the executive from the very start, his judicial powers were mainly magisterial and restricted to the maintenance of law and order in the district. On the development side, he co-ordinated the activities of various other departments such as agriculture, animal husbandry, co-operation, social welfare, etc., which were now created at the district and lower levels

The second phase began with the increasing association of the public with the welfare activities undertaken by the State. The Collector was also the Chairman of the District Development Board, which looked after development work in rural areas, particularly in the field of agriculture, irrigation, community development, co-operation, social education, panchayats, etc. A further step in the direction of popular association and local self-government was taken by the establishment of panchayats in villages or groups of villages with a view to associate the people in the administration of the villages. They were thus enabled to take active interest in works of public welfare and utility, and accelerate the pace of constructive activities for the amelioration of the village people. Panchayats were also invested with powers to try petty criminal offences and certain civil disputes.

PANCHAYAT RAJ—The third phase in the evolution of the administrative structure appeared when the Gujarat Panchayats Act of 1961 was implemented in 1963 with a view to democratise the entire administrative machinery from the village to the district level. The Act aims at streamlining the administration at the lower levels in tune with the popular institution at the Centre (Lok Sabha and Raj Sabha) and in the State (Vidhan Sabha) by transferring important nation-building activities to the elected representatives of the people functioning at the village, taluka and district levels endowed with necessary powers, administrative personnel and adequate financial resources. This revolutionary change in the administrative set-up led to the bifurcation of functions and responsibilities of the Collector, who now retains certain powers in respect of land revenue administration, those relating to the maintenance of law and order, and others not transferred to the panchayats. All the development activities which were formerly within his charge as well as some of the functions under the Land Revenue Code, have, as will be seen later in the Chapter on "Local Self-Government" been transferred to the panchayats constituted under the Gujarat Panchayats Act. Under this set-up there are 3 elected bodies, namely the jilla panchayat, taluka panchayat and the village or nagar panchayat. The principal Executive Officer of the district panchayat is the District Development Officer, drawn either from the Indian Administrative Service or selected from amongst those suitable for this office. The Taluka Development Officer is likewise the principal officer at the level of taluka panchayat and the Gram Panchayat Secretary at the village level.

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ROLE OF THE COLLECTOR

The Collector used to be the pivot of the district administration. Because of the overriding importance of his role as well as his proximity to the people, he was considered to be the measuring rod of efficiency in the administration. Besides superintending the realisation of land revenue, the duties of administering the collection of excise and other special taxes and of supervising the stamp revenue also devolved upon the Collector as the executive head of the district. Before the Gujarat Panchayats Act of 1961 came into force he co-ordinated the work of the different departments and ensured implementation of the development schemes in the district. Being the principal revenue authority in the district all revenue functions were exercised by the Collector prior to the implementation of that Act. But on the introduction of the Panchayat Raj in 1963, the collection of land revenue has been entrusted to the panchayats. The Collector is further responsible for the collection of fees, dues, etc., recoverable under various Acts, such as the Bombay Irrigation Act, the Bombay Entertainment Duty Act, the Bombay Electricity Duty Act and the Gujarat Education Cess Act. There are also other Revenue Acts which provide for the recovery of certain dues as arrears of land revenue. Under the Prohibition Act, the Collector is empowered to issue permits to liquor and drug addicts and recover assessment fees from shops permitted to sell liquor and drugs. He is also the Chairman of the Prohibition Committee of the district.

The Collector is also the District Magistrate. Under section 17(1) of the Bombay Police Act (XXII of 1951), the Superintendent of Police and the Police force of the district are under the control of the District Magistrate The Superintendent of Police, who is the executive head of the police exercises general powers subject to the orders of the District Magistrate. Besides being in control of the Police, the Collector as District Magistrate has extensive powers under the Criminal Procedure Code, the Bombay Police Act and other Acts for the maintenance of law and order. He is responsible for the prevention of nuisance and other allied matters under the Criminal Procedure Code and for proper administration of jails and sub-jails to a certain extent. In his capacity as District Magistrate he is concerned with the issue of licences and permits under the Arms Acts, the Petroleum Act, the Explosives Act and the Poisons Act. Under the Factories Act of 1948 the District Magistrate is an Inspector for his district, in which capacity he has powers of inspection and supervision of factories, magazines, etc.

Prior to 1962 the District Treasury was under the overall charge of the Collector to whom the District Treasury Officer was subordinate. He was responsible for all the cash, stamps, etc., received in the treasury as also for the proper maintenance of accounts. The Sub-treasury establishments at the Taluka and Mahal headquarters formed part of the Revenue establishment in the district. From 1st April, 1962, the Sub-treasury establishments were

separated from the Revenue administration and placed under the administrative control of the Director of Accounts and Treasuries working under the Finance Department. The Collector, however, continues to exercies general powers and functions as the Head of the local administration. The treasury is thus under the direct control of the Finance Department, though the Collector exercises supervision over it as required under the Bombay Treasury Rules.

Among the quasi-judicial functions of the Collector, over and above the hearing of appeals from the Prant Officer under the Land Revenue Code and various other revenue laws, the following may be mentioned: (1) revisional powers under Section 23 of the Mamlatdar's Courts Act which are delegated by him to an Assistant or Deputy Collector; (2) functions which the Collector performs in connection with the execution of Civil Court decrees; (3) proceedings and awards under Section 11 of the Land Acquisition Act; (4) cases under the Bombay Government Premises (Eviction) Act; (5) powers exercised as District Magistrate under the Preventive Detention Act.

Besides land revenue, tenancy reforms and magisterial work, the Collector is in charge of various important duties connected with civil supplies, small savings, land acquisition, elections to the State Legislature and Lok Sabha, Census, etc. As a District Registrar he controls the administration and work of registration of documents within the district and supervises the work of Sub-Registrars at the taluka and mahal levels and ensures proper performance of their duties under the Indian Registration Act. Under the Famine Relief Code, 1951, the Collector is required to keep himself at all times informed about the agricultural conditions within the district, organise relief measures and create as far as possible a permanent Famine Relief Fund on a charitable basis for the relief of the needy persons. With a view to accelerate the tempo of development of industries in the district and to achieve more effective co-ordination in providing infra-structure facilities to industries, Government has designated Collectors as *ex-officio* Deputy Commissioners of Industries and delegated to them certain functions and powers for the allotment of factory sheds and open plots in the Government industrial estates, formulation of the District Master Plans and co-ordination of activities of various heads of offices and departments.

Collector's Office—The two main branches in the Collector's office are (i) Revenue and (ii) Supply, each of which is under a Deputy Collector. The Deputy Collector in charge of revenue is also the Resident Deputy Collector and Personal Assistant to the Collector. The Deputy Collector looking after the supply branch is designated as District Supply Officer. For the purpose of administration the district is divided into two subdivisions, viz., (a) Jamnagar subdivision comprising (i) Jamnagar (ii) Kalavad (iii) Lalpur (iv) Dhrol and (v) Jodiya talukas and (b) Khambhalia subdivision comprising (i) Khambhalia (ii) Jamjodhpur (iii) Bhanvad (iv) Kalyanpur and (v) Okhamandal talukas. The

Jamnagar subdivision is headed by a Deputy Collector who has his headquarters at Jamnagar. The head of the Khambhalia subdivision is designated as Assistant Collector and has his headquarters at Khambhalia. The taluka heads are Mamlatdars who work under the Assistant/Deputy Collector of the subdivision.

The Assistant/Deputy Collector is also Sub-Divisional Magistrate for his subdivision. After the separation of judiciary from the executive he does not try criminal cases except certain proceedings under the Criminal Procedure Code. The Mamlatdar is the head of the revenue administration at the taluka level. He is for his charge what the Collector is for the district. By virtue of his office he is also the Superintendent of the Taluka Sub-Jail and the Assistant Custodian of the Evacuee property under the Bomby Evacuee (Administration of Property). Act, of 1949.

JUDICIARY—Another important department at the district level is the Judicial Department headed by the District and Sessions Judge who exercises jurisdiction in matters Civil, Criminal and Appellate. One noteworthy feature of the judicial administration in the Nawanagar State regime was the complete separation of the Judicial and executive functions. The powers of the High Court were exercised by the Hazur Court. All appeals, criminal and civil, as well as applications for revision except appeals against capital punishment were heard by the Diwan. The appeals in which capital punishment was awarded were heard by the ruler himself.[1] After the formation of the State of Saurashtra, the Saurashtra Separation of Judicial and Executive Functions Act, 1952 was introduced to bring uniformity in the working of courts in the State. This was repealed after the integration of Saurashtra into Bombay State when the Bombay Separation of Judicial and Executive Functions (Extension) Act, 1958 came into force from 1st September, 1959. It has divided the magistracy into 'Judicial Magistrates' who are subordinate to the District and Sessions Judge and 'Executive Magistrates' who are subordinate to the District Magistrate. The judicial set-up of the district is at present comprised of one District and Sessions Judge, one Civil Judge (Senior Division), and 7 Civil Judges (Junior Division), (For details, see Chapter XI—Law, Order and Justice).

DISTRICT DEVELOPMENT OFFICER

The office of the District Development Officer has come into existence for the first time on the introduction of the Gujarat Panchayats Act in 1963, when the entire machinery at the district level was democratised by transferring the powers and functions of various departments to elected bodies at the district, taluka and village levels. The District Development Officer is the Chief Executive Officer and *ex-officio* Secretary to the District Panchayat. As

1. *Nawanagar Administration Report*, 1915-16

his name indicates he is responsible for the proper execution of the development programme in the district, the details of which will be found in Chapter XIII—Local Self-Government.

DISTRICT LEVEL OFFICERS

The general tenor of administration has been completely transformed after Independence. A number of new departments which did not exist in the past have been brought into being to subserve the objectives of a welfare state. Besides Revenue, Judiciary and Police which were the principal departments in Indian States, Agriculture, Animal Husbandry, Co-operation, Rural Development, Pachayats, Public Works, Social Welfare, and Education in all its phases are now functioning with enlarged powers and resources having their functionaries at various levels of administration. The following is the list of district officers functioning at the district level.

1 District and Sessions Judge
2 Collector
3 Executive Engineer, Roads and Buildings, Public Works Department
4 Executive Engineer, Irrigation, Public Works Department
5 Executive Engineer, Public Health
6 Educational Inspector
7 District Treasury Officer
8 District Employment Officer
9 District Labour Officer
10 Sub-Divisional Soil Conservation Officer
11 Quarry Inspector
12 District Inspector, Prohibition and Excise
13 Assistant Examiner, Local Funds
14 Port Officer, Bedi-Jamnagar
15 Port Officer, Okha
16 Forest Settlement Officer
17 District Information Officer
18 District Inspector of Land Records
19 Sales Tax Officer
20 District Administrative Officer, Home Guards,
21 Industries Officer
22 Superintendent, District Jail
23 District Registrar, Co-operative Societies
24 Medical Officer, Mental Hospital
25 Medical Officer, Malaria Unit
26 Resident Deputy Collector
27 District Supply Officer
28 Social Land Acquisition Officer
29 Rehabilitation Officer

30 District Records Keeper
31 District Organiser, National Small Savings
32 Deputy Collector, Revenue
33 Curator, Jamnagar Museum
34 Supervisor, Rural Broadcasting
35 Royalty Inspector, Geology and Mining Department
36 Motor Vehicle Inspector
37 Superintendent, Fisheries Department
38 Superintendent, Irwin Group Hospitals
39 Grass Officer
40 Millet Officer

All these offices, except one mentioned at 15 above are located at Jamnagar.

OFFICERS UNDER DISTRICT PANCHAYAT

After the implementation of Gujarat Panchayats Act. 1961 in the district and with the transfer of many departmental schemes a number of district level functionaries has been transferred to the District Panchayat. These officers are under the administrative control of the District Development Officer, but for technical supervision they are under the control of their own heads of departments at the State level. The following is the list of officers under the district panchayat.

1 District Development Officer
2 District Agriculture Officer
3 Administrative Officer, Education
4 District Health Officer
5 District Ayurved Officer
6 District Animal Husbandry Officer
7 District Social Welfare Officer
8 District Statistical Officer
9 Executive Engineer. Panchayat
10 Deputy Collector, Panchayat
11 Assistant Registrar, Co-operative Societies
12 District Village Panchayat Officer

CENTRAL GOVERNMENT OFFICES

In addition to State Offices, there are several Central Offices located in the city of Jamnagar. They are listed below.

1 Assistant Central Intelligence Officer
2 Appellate Assistant Commissioner, Income-tax

3 Income-tax Officer
4 Assistant Collector, Central Excise
5 Post Master, General Post Office
6 Sub-Divisional Officer, Telegraphs
7 Sub-Divisional Officer, Telephones
8 Assistant Engineer, Western Railway
9 Assistant Salt Commissioner
10 Director, Lighthouses and Lightships
11 Aerodrome Officer, Air Port
12 Garrison Engineer (M. E. S.)
13 Garrison Engineer (M E. S.) (Navy)
14 Garrison Engineer (Air Force)

CHAPTER X

REVENUE ADMINISTRATION

PRE-INDEPENDENCE PERIOD

Saurashtra

In pre-Independence period, there was a marked variation in the land revenue systems prevalent in the British territory on the one hand and the princely areas on the other. The former had more or less a uniform pattern except such divergence as arose from local variations in land tenures. No shch uniformity existed in the Indian States and Estates except in case of those few which adpoted the British system of revenue administration.

Before examining the particular conditions of land revenue system obtaining in this district, it will be useful to have a general idea of the peninsula as a whole, which was divided into as many as 222 States and Estates integrated into the Union of Kathiawar later called Saurashtra, from 15th April, 1948. Owing to the feudal character of the economy in this region, there were a variety of tenures and diversity in the modes of assessment and recovery.

The lands comprised in various States, Talukas, Thanas, etc., may be divided into 3 categories, viz.,

(*i*) *Khalsa* lands of the covenanting States and talukas where cash assessment was levied.

(*ii*) *Khalsa* lands of the covenanting States and talukas where crop share or *bhagbatai* system prevailed, and

(*iii*) Non-*khalsa* lands comprising Girasdari and Barkhali areas where rent was levied mostly in the form of crop share.

LAND TENURE SYSTEM

The land tenure system prior to 1948 may be broadly classified into *khalsa*, Girasdari and Barkhali tenures. Under the *khalsa* tenure land was held by the cultivators direct from the State, while under the other two types of tenures, they were the tenants of the Girasdars and Barkhalidars and occupied the land under their pleasure. The term Girasdar included Talukdars, Bhagdars, Bhayats and Mulgirasias, who enjoyed proprietary rights

over the land, Barkhalidars included Inamdars, Jiwaidars, Dharmada or Kherati grantees and service tenures such as Chakariats and Pasaitas who were merely entitled to the use of land granted to them but did not possess any proprietary rights. The term Barkhalidar literally means a landholder whose produce of the land remains outside the *khala* or the common threshing floor. Since payment in kind was the usual mode of recovery of land revenue, the produce was first brought to the *khala* where *rajbhag* or the ruler's share of land revenue was first separated and recovered. The Barkhalidar was not required to bring the produce to the *khala*, as he had not to pay any share to the State by way of revenue.

The differet categories of land tenures in existence at the time of integration were :

(*i*) *Khalsa Lands*—The land was held by the tenants directly from the State which recovered land revenue either in the form of crop share or cash. The cultivators of *khalsa* land in the smaller States were mere lessees whose occupation of land depended on the will of the ruler.

(*ii*) *Talukdars*--The Talukdars were small chiefs or estates holders also styled Bhoomias. Prior to the entry of the British in the peninsula, they suffered on account of annual *mulukgiri* campaigns of the Marathas which brought havoc in the countryside and terrorised the princes and peasants alike. Moreover, States in the peninsula also waged petty wars among themselves. Disorder and lawlessness prevailed in the greater part of Kathiawar and the condition of the petty estate holders became insecure. To put an end to these conditions some of the weaker Talukdars applied to the British Resident at Baroda in 1803 for protection and offered to cede their territory to the Honourable English Company. Commenting upon the proposal the Resident observed, "With the reservation of their acknowledged tributary payments the Kathiawar States are independent and at liberty to form connections with other powers. They are under no obligation of service and neither the Peshwa nor the Gaekwar pretend to exercise an authority in Kathiawar beyond the demand of their respective contributions."[1] The British Government acceded to the request of Talukdars as it was interested in the stability of Gaekwad's revenue and establishment of law and order in the peninsula. In 1807, Colonel Walker, along with the forces of the Company and the Gaekwad entered the peninsula with a view to free it from the double scourge of outside invasion and domestic warfare. "This was effected by taking engagements from the chiefs, who bound themselves (1) to pay voluntarily a fixed and settled tribute thenceforward for ever ; (2) to keep the peace towards each other and maintain order within their own limits

1. KADAKA, D. H., *The Kathiawar Directory*, Rajkot, 1886, p. 14

In return they were secured from the visitations of the Mulukgiri force."[1] Under these engagements, known as Walker's Settlement, Colonel Walker fixed the amounts payable by various chiefs as tribute to the Gaekwad. The boundaries of the States and talukas were also fixed by him once and for all, and the Talukdars recognised as independent States with jurisdictional rights. As a result of Colonel Walker's Settlement the Saurashtra peninsula enjoyed peace and security but the position of the Girasdars and other land-lords continued to be the same. Furthermore there was no significant change in the land system as a result of the settlement. The proprietary rights of Talukdars were recognised and protected against usurpation by the stronger chiefs. Talukdars were deemed to have life interest in their taluka, which they could neither sell nor mortgage.

(iii) *Mulgirasias*—They were the descendents of the original proprietors of villages whose possession and ownership dated prior to the establishment of the various States under whom they were found. In course of time a fiction grew up that there was a commendation of the holdings of the Mulgirasias to the chiefs, who rebestowed them to the former. This theory of commendation was used to support the escheat of the Mulgirasia's land to the Darbar on the failure of his heir and collaterals as also in the event of its permanent transfer by sale, gift or otherwise, as a Mulgirasia could not make any permanent alienation of his land. His rights of alienation by mortgage and sale were in course of time regulated by the Kathiawar Political Agency Notification No. 49 of 1891, under which he could mortgage his holding to any party but could sell only to the Darbar or to his collaterals with the prior sanction of the Darbar. For the right of pre-emption always rested with the collaterals. The Mulgirasias had to pay to the Darbar a contribution known as *sudhara varad* for carrying on works of general improvement in the village. usually fixed at the rate of 2 annas (equal to 12 paise) per acre of cultivable land.

(iv) *Bhayats*—The word literally means and includes members of the younger branch of a chief's or Talukdars family where the State followed the rule of primogeniture. They received grants-in-appanage as their birthright to a share in the patrimony. States like Gondal and Jasdan and later Bhavnagar followed the practice of giving the *giras* in cash, to their immediate relatives. Bhayati *giras* ordinarily reverted to the garntor in the absence of a lineal male descendent, and its alination by mortgage or sale was generally prohibited. The Bhayats also paid *sudhara varad* to the State besides discharging various political and other obligations to their chiefs in the form of military and social services.

(v) *Inamdars*—They were holders of Inam land granted by the State or the Darbar in appreciation of services rendered or for pleasure.

1. KADAKA D. H., *The Kathiawar Directory*, Rajkot ; 1886, pp 14-15

(vi) *Jiwaidars*—Grants in *jiwai* were given for maintenance without any proprietary interest in the land which lapsed to the State on the death of the grantee.

(vii) *Dharmada or Kherati Holders*—Grants of land were made in favour of religious institutions, temples, mosques, etc., for their upkeep, performance of worship, etc. These grants were not liable to resumption except in case of maladministration or mismanagement.

(viii) *Chakariyats and Pasaitas*—These were lands granted to village servants in lieu of performance of service to the State and the village community. The grantee continued in possession so long as he rendered service for which it was given.

LAND REVENUE IN SAURASHTRA

Cash assessment was in vogue where settlement was introduced as in States like Bhavnagar, Nawanagar, Wadhwan, Gondal, Morvi, Junagadh, Palitana and others. Even in these States there was a great diversity of rates from area to area, the average rate of assessment varying from Rs. 2·00 per acre in Morvi to Rs. 3·78 in Palitana as against the general average of Rs. 3·12 per acre for all of them combined.

Crop share system prevailed in the *khalsa* lands of the "Non-settled" States of Porbandar. Dhrangadhra, Wankaner, Dhrol, Rajkot, etc., and in the non-*khalsa* areas representing girasdari lands in non-jurisdiction estates and talukas. Crop share varied from ½ to 1/7th of the produce. Besides crop share, cash assessment was also levied in respect of some of the crops in addition to a cess called *santi vero* (plough tax) recovered by some of the States.

Pre-Independence Period

Nawanagar State—For a long time in the past the usual mode of realisation of land revenue in the most of the area comprising this district was crop share which varied according to the nature of crops and fertility of soil. A vivid and concise description of the land administration in Nawanagar State about the year 1879 before the introduction of survey and settlement operations given in the *Statistical Account of Nawanagar* is extracted below.

"The Revenue administration of Nawanagar State is conducted on the *bhagwatai* principle that is to say a share of the produce in kind is levied by the Darbar as rent for the land in addition to certain ready-money levies. This share of the produce levied, is called *rajbhag* or State

share, the remaining share being called *khedu bhag* or cultivator's share. The amount levied as *rajbhag* is not uniform, but varies in different parganahs and fluctuates between one-third and one-sixth of the entire crop. This refers to rain crops only, as a somewhat less portion is levied from cold-weather crops. A special levy is made from sugar-cane fields, viz., varying from one-eighth to one-tenth of the entire quantity of molasses manufactured.

The cultivator in addition to the *rajbhag* pays (1) *kharajat*, which is a levy nominally to defray the expense of the revenue administration, it varies from 72 sirs to 108 sirs (of 40 tolahs each) per *kalshi* of the entire produce; (2) *Mapla* which varies from 72 sirs to 108 sirs per *khala* or grain heap, consisting of the entire produce. This is paid by the Darbari official to the village artisans who have rights on the villager's produce and to temples etc. etc; (3) *khola* (or grain carried away in the lap). This is levied by the Patel in an arbitrary manner, but at the average rate of about from 9 to 90 sirs per grain heap, according to the gross amount of the produce. This is not retained by the Patel, but is paid by him to the Darbar; (4) *Muthi-Chapti*, literally a handful and pinch. This is a due levied by the servant of the *wahiwatdar* or Darbari official, and is retained by him; it amounts to about 1 sir to 5 sirs per grain heap.

The ready-money levies are three, viz., (1) *santi vero*—This is levied at the rate of from Koris 20 to 75 per *santi*. The *santi* is a piece of land varying in different localities from 40 to 100 vighas (of which three go to an acre); (2) *ghisra vero* is levied per pair of bullock, at the rate of from Koris 20 to 75 per pair of bullocks, according to the quality of the land in the holding of the cultivator; (3) *udhad vero*—This is a fixed amount including both levies in kind and ready-money, and is settled with the ryot by special agreement. Where *santi vero* is levied from a cultivator, he is not liable to *ghisra vero* also, and so. if he pays *ghisra vero*, he is not liable to *santi vero*, but they who pay either of these dues are liable also to *rajbhag*, *kharajat*, *Mapla* and *Muthi-Chapti*. Payers of *udhad vero* alone are exempt from all other demands.

The non-cultivating classes, including the artisans and labouring classes, pay annually a small sum of ready-money to the Darbar under the name of *udhad vero*.

In the vassal-held villages, speaking generally, the same revenue system obtains as had been mentioned above; ryots in vassal villages are perhaps more subject to *veth* than in crown villages.

Veth is the right of obtaining from certain persons services without money remuneration. Thus cultivators can be compelled to lend their

carts and cattle, and the village artizans can be compelled to labour without money remuneration for the local landholder, or if the village be *khalsah*, for the Chief. The artizans are, however, remunerated by rights on the grain yard, when the crops are harvested, both from Chief and cultivator. The rendering gratuitous service to the lord in due turn with others, is part of the understanding between landlord and tenant when they enter the villages ; but on such occasions as the labourer and artizan are employed on the Chief's service, they obtain their food from him.

Formerly the parganahs were given in farm to influential persons of the Court, who in their turn sublet the farms of groups of villages or of single villages to their friends and relations, who again shared or sublet the village or group. By this means the Darbar obtained a minimum of profit and the ryot was rack-rented. Now the parganahs are directly administered by Revenue officials belonging to the State, and the condition of the ryot has been thereby much benefitted."[1]

It was in the beginning of the 20th Century that the *bhagbatai* (crop share) system was for the first time replaced by cash assessment in Nawanagar State in 1907. It was introduced in 17 villages of Paddhari mahal and gradually extended to other areas. By the year 1917 cash assessment was introduced in all the villages of the State, resulting in an even and smooth collection of revenue to the Darbar and a uniform measure of contentment and happiness to the ryots. Survey operations were simultaneously taken in hand and completed in 1917. In addition to the introduction of cash assessment cultivators in the State since 1919 were granted occupancy rights (i. e., *chav, buta* or *vechan haks*), including the rights of transfer, sale, gifts, inheritance, adoption, etc., the Darbar retaining mere formal seigniorial rights over the land. In no case was the holder permitted to transfer his holding to a non-agriculturist or a person not the subject of the State, without prior sanction of the Darbar. In the matter of inheritance and succession, the holder dying without a male issue, and failing to make disposition of his holding, the widow was permitted to enjoy her husband's lands during her life time. On the death of the widow the holding was passed on to the holder's daughters or sons in accordance with the Hindu Law. Records of rights were also introduced. Payment at the rate of Rs. 10 per acre was recovered from the holder in 16 annual instalments as consideration for the grant of occupancy rights. Right of proprietorship of houses, *vadas*, etc. was also conferred on the cultivators, and extended to ubhads or non-cultivator classes and untouchable like, Dhedh, Chamar and Bhangis on payment of a nominal price.

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1 WATSON, J. W., *Statistical Account of Nawanagar*, Bombay, 1879, pp. 38-41

Dhrol State—*Bhagbatai* or crop share system was in vogue also in Dhrol State. Over and above the *santi vero*, the *vaje* share or *rajbhag* was 1/3rd share of the produce levied in *agtar* crops and 1/4th share in *pachhatar* crops. *Vighoti*, i. e., cash assessment was levied in *khalsa* villages only in sugar plantations. The cultivators in the State being tenants-at-will had no permanent interest in the land held by them. They could not alienate their holdings either by way of mortgage, sale or in any other way. However, they were never evicted except in extreme cases of default and neglect in their occupation as cultivators.

OKHAMANDAL

Describing the system of land revenue then in vogue in Okhamandal, the *Kathiawar Gazetteer* states:

"There are two descriptions of land tenure, the *bhog* and the *salami*. *Bhog* which literally signifies enjoyment, being also used in the sense of full assessment is the tenure under which all Okhamandal husbandmen, not under the jurisdiction of the Assistant to the Agent to the Governor General, are allowed to take up land for agricultural purposes. Such holders may retain the land they cultivate for the whole of their lifetime so long as they regularly pay the land assessment, and provided it is not required for public purposes. Their heirs may succeed to this land on similar conditions. The *salami* tenure is applicable to Vaghers and their cognate tribes, each of whom is entitled to a *santi* (48 *bighas*) of land, on payment of one rupee per annum, provided he can satisfy the authorities that he possesses a pair of bullocks and the requisite agricultural implements; and conditional also upon his good behaviour. If a Vagher or a Vadhel in the enjoyment of *salami* land wages war against the Queen or Gaekwar, or goes into outlawry, he *ipso facto*, forfeits his holding for ever. No *salami* holder can alienate his land by sale, gift or mortgage. He cannot sublet it under any circumstances whatsoever, nor can he transfer it to another without express permission being officially accorded. Three rates of assessment on *bhog* land prevail in the district. The highest rate for the land in the northern and central Okha, which is the most fertile in the district, is fixed at Rs. 22 per *santi*; the next rate is Rs. 20 per all land in southern Okha; and the third rate is Rs. 12, leviable on land in the north-west corner of the district in the vicinity of Aramda, the soil of which is sandy and comparatively unproductive. The revenue is payable in two instalments; the first being due immediately after the harvest, and the second two months later, but cultivators may pay up the whole amount in a lump sum if they so wish. If a land-holder refuses to pay his arrears of revenue, his private property may be seized and sold by auction in satisfaction of the State demands.

Ploughing animals and agricultural implements are however, exempt from seizure. Cases of failure to pay up arrears are very rare except, of course, during seasons of drought, which occur quadrennially on the average, when suspensions are granted but not remissions. Mehmans are generally very regular in meeting their liabilities, but Vaghers are dreadfully backward in this respect, and the collection of revenue from them has always been a wearisome and difficult process."[1]

The *salami* tenure was thus an outcome of unsettled political conditions obtaining in the region of Okhamandal and the recalcitrant and independent nature of Vaghers and Vadhels. This area was made over to the Gaekwad in 1817, who was not in a position to maintain its hold over it. Owing to the frequent riots of the Vaghers, it was taken over by the British in 1861, till the administration was again handed over to the Gaekwad in 1920. The British, with a view to pacify the Vaghers, introduced *salami* tenure referred to above, whereunder they were allowed to cultivate land held by them on payment of a nominal rent of Re. 1 per *santi*. The system of assessment was, however, reviewed in 1911, when the area exempted from full assessment was limited to a *santi* of 48 bighas and the rest was held on full payment under *khalsa* tenure. This arrangement was to continue till April, 1950 and the position was to be reviewed thereafter. On the integration of Baroda territory into the State of Bombay, Okhamandal was included in Amreli district. In pursuance of the Government Policy of introducing agrarian reforms, the *salami* tenure was abolished by the Bombay (Okhamandal Salami Tenure) Abolition Act, 1953 and the exemption of land revenue so far enjoyed by the Vaghers came to an end as they were subject to the payment of full assessment as ordinary occupants. The Vaghers and Vadhels have been strongly agitating against this reform as it has been instrumental in losing their *giras* for ever. The progress with implementation of tenancy legislation has been reviewed later under Land Reforms introduced in the district.

General--To sum up, in villages under Girasdars the cultivators were tenants-at-will. The rulers, Talukdars and Girasdars possessed full and absolute rights over the lands on which the tenants paid crop share which varied from one crop to another and from irrigated to non-irrigated. Over and above the payment of assessment in kind, the tenants laboured under the incidence of many petty and obnoxious cesses and taxes coupled with an obligation to render personal service known as *veth* or forced labour. A census of different cesses prevalent in various parts revealed that these were more than 90 in number. This phenomenon naturally resulted in rack-renting, arbitrary evictions, and forced labour.

1. CAMPBELL, J. M., *Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar*, 1884, pp. 599-600

LAND POLICY OF THE GOVERNMENT OF SAURASHTRA

Under these circumstances, the immediate problems the Government of Saurashtra was called upon to face were (1) grant of permanent rights to tenants over the lands held by them, (2) conversion of crop share into cash assessment in respect of *khalsa* and non-*khalsa* land, and (3) establishment of a uniform system of land tenure. The business like manner in which these problems were solved will be evident from a series of ordinances and enactments passed by that Government soon after it assumed the reins of office.

Various preparatory measures were taken immediately after integration with a view to rationalise the land revenue system and bring it on par with that in the Bombay State by adopting the Bombay Land Revenue Code (1879) as amended from time to time with certain modifications. In its land policy declaration, it announced that :

(1) All forced labour (*Veth*), *lagas* and letries wherever levied in addition to the crop share or cash assessment were abolished forthwith. This declaration was followed by a proclamation on 15th April, 1948 conferring heritable and transferable rights on all the cultivators of *khalsa* villages without charging occupancy price. This made overnight all the cultivators of such areas occupants within the meaning of the Land Revenue Code.

(2) Crop share (*bhagbatai*) system in all khalsa areas was ordered to be substituted by cash assessment (*vighoti*), as the existence of crop share at one place and of cash assessment at the other in respect of lands enjoying similar rights was somewhat perplexing. In the circumstances then prevailing, it was not feasible to introduce scientific survey and settlement operations immediately An ad hoc lump sum assessment was, therefore, fixed on the average of recoveries of the last fifteen years, 1933 to 1947.

(3) Arbitrary cesses recovered in addition to the normal land revenue from cultivators were abolished from *khalsa* as well as non-*khalsa* areas of the State.

(4) Diversity of revenue laws and orders was done away with by the adoption of the Bombay Land Revenue Code, 1879, which was made applicable to the State by an Ordinance passed in 1948.

(5) A separate department was created for the unification of the survey and settlement operations

Introduction of Cash Assessment - After the integration of States the Saurashtra Government attempted to reduce the diversities and inequalities

in assessment by adopting the following three methods in different categories of villages : (1) cash assessment by regular scientific survey; (2) lump sum assessment worked out on the average of the crop share for the period 1933-47 in *khalsa* villages where *bhagbatai* prevailed before integration and (3) assessment calculated on the arithmetical averages of assessments leviable in the surrounding *khalsa* villages for the purpose of the Land Reforms Act and the Barkhali Abolition Act. Accordingly 538 villages of this district were settled by the first method, 25 brought under lump sum cash assessment and the remaining 170 villages[1] assessed on the basis of arithmetical averages of the surrounding *khalsa* areas. As a result of these measures, land assessment was rationalised, all intermediaries on land were removed and the Ryotwari system of land tenures introduced in the whole of Saurashtra.

Interim Measures for Protection of Tenants--The Government of Saurashtra also initiated far-reaching measures in non-*khalsa* lands by tackling the problem of tenancy and affording the tenants all protection against eviction.

The Saurashtra Protection of Tenants Ordinance No. XXII of 1948 was issued to protect tenants from arbitrary eviction. It provided that in case a landlord required land for personal cultivation the tenant who was the holder of that land should be served with a notice six months in advance. This Ordinance safeguarded tenants against arbitrary eviction but disputes regarding rent still continued as there was no provision for the regulation of rent. Government, therefore, promulgated another Ordinance, viz., the Saurashtra Zamindars and Tenants Settlement of Rent Disputes Ordinance No. XXVI of 1948 which empowered Mamlatdars to take charge of the crops in disputes and Deputy Collectors to terminate rent on the basis of the Anida settlement under which landholders were enjoined not to evict tenant and to recover rent not exceeding 1/4th and 1/5th share in unirrigated and irrigated crops respectively. The Saurashtra Protection of Tenants (Amendment) Ordinance No. XXXI of 1948, passed thereafter, provided *inter alia* for the appointment of joint committees of landholders and tenants for settlement of disputes relating to ejectment of tenants and recovery of rent. It also provided that instead of the 1/4th and 1/5th share, the formula of rent agreed to by the representatives of both the parties should be taken as a basis for fixing rent. This Ordinance also did not help in lessening the tension that already existed in the relations between the tenants and the landholders and it was feared that there would be large scale evictions of tenants. To avoid a situation the Saurashtra Temporary

1. Out of 733 villages in the district 578 villages were *khalsa* and 155 non-*khalsa*.

Protection of Eviction Ordinance No. XXVIII of 1949 was issued. This Ordinance provided that notice given by landholders under the Saurashtra Zamindari and Tenants Settlement of Rent Disputes Ordinance of 1948 shall not be deemed to terminate tenancy. Even this Ordinance failed to solve the problem of eviction. Ultimately, Government promulgated the Saurashtra Gharkhed Tenancy Settlement and Agricultural Lands Ordinance No. XLI of 1949 repealing all the previous Ordinances. It made provision for the grant of certain quantity of land for personal cultivation to the landholders declaring the tenants on the remaining land as protected tenants. The Ordinance empowered Government to assume management of estates in case of disputes between landlord and tenants. It also provided that Government should fix (1) the assessment for Gharkhed and non-Garkhed land and (2) the basis of rent payable by tenants to landholders. The Ordinance provided for a levy of four annas (equal to 25 paise) per acre from landholders in respect of their Gharkhed lands and of 12½ per cent of the revenue on non-Gharkhed lands. Assessment was determined on the basis of principles laid down by Government which provided that (1) cash rent would be levied where cash rent existed at any time in the past but if *udhad* or lump sum was fixed at any time, rent would be levied according to such *udhad*, (2) if there was neither cash assessment nor *udhad* in such villages and only crop share prevailed, cash rent would be determined on the basis of the average of the cash assessment leviable in surrounding *khalsa* villages. The rate, however, was subject to a maximum limit of Rs. 3 per *bigha* of *jirayat* land and Rs. 6 per *bigha* of *bagayat* land. This Ordinance was liked neither by the landlord nor by the tenant who had still to face eviction notices in case the landholder chose to have that particular land for Gharkhed as he was at liberty to choose any tenant for eviction. Landholders also disliked this Ordinance because it failed to permit Gharkhed land for all of them and those who were entitled to get it thought that the area allotted was too small.

All these were temporary measures, more or less in the nature of palliatives, which emphasised the urgency of introducing agrarian reforms of a far reaching character reviewed in the section that follows.

Land Reforms

Before Independence there were various terms and conditions called tenures upon which land was held by the agriculturists and others. These tenures were a product of a long evolution determined by the geographical, economical, social and political conditions prevailing at different times of history. In former times the bulk of revenue from land was derived in the form of crop share which was subsequently commuted into cash rent The Muslim rulers introduced a system of intermediaries who were small revenue farmers, who collected revenue on behalf of Government. With the

disintegration of the Mogul Empire, these farmers became independent and claimed proprietary right in the soil. Marathas created a hierarchy of graded officials in districts and remunerated them by grant of land. In the result, a large number of land tenures developed in different parts of the State. At times Government alienated revenue of a certain estate or tract of land in favour of some person of importance or to provide funds for a special purpose. All these tenures were continued till they were abolished on Independence.

With the advent of Independence, these intermediaries were considered outmoded from the view point of social justice. Existing land tenures operated as an impediment to the maximum utilisation of the agricultural resources of the country. For establishing a progressive and healthy pattern of peasant proprietorship, it was imperative to abolish the multiplicity of tenures of a feudal character, which created tenancy-at-will and deprived the peasant of the fruits of his own labour. For the maximum exploitation of land, it was also necessary to remove the intermediaries and to encourage the tiller of the land to expend all his energies on stepping up agricultural production. With this end in view, various measures of land reforms and tenancy protection were initiated and implemented by the Governments of Saurashtra and Bombay immediately, after Independence for the abolition of Girasdari, Barkhali, Talukdari and other tenures to stabilise the peasantry on land. These will now be reviewed first (i) for Saurashtra area, and (ii) for Okhamandal taluka which then formed part of Amreli district both of which originally formed part of Baroda State merged in Bombay State in 1949.

Saurashtra Area

The former State of Saurashtra was the result of integration of 222 States and estates, some of which were first class States having a progressive system of administration, whereas the majority of them were small principalities. After their merger into the United State of Kathiawar subsequently styled part B State of Saurashtra, the problem of bringing about all the different land tenure systems on a uniform basis came to the forefront. As seen in the preceding paras this was tackled by the Saurashtra Government by conferment of full occupancy rights in all villages which were previously under the direct jurisdiction of the covenanting States. However, the existence of intermediary tenures of Barkhalidars and Girasdars created an anomalous situation in asmuch as their tenants did not acquire the occupancy rights conferred on their counterparts in *khalsa* lands who enjoyed the benefits of paying direct assessment to Government, security of tenure, fixity of rent and the right to transfer the lands cultivated by them. Thus out of the 4,400 and odd villages of the former Saurashtra State, the cultivators of nearly 2,700 villages obtained full occupancy rights immediately on the formation of the new State, while in the rest of the villages numbering 1,700 and covering

nearly 1/3rd of the area there still persisted diverse systems of land tenure and revenue assessment. The cultivators under the Girasdari and Barkhali tenures were mere tenants-at-will except in such cases known as *chav* or *buta hak*, which gave them some security of tenure. For removing the sense of insecurity, bringing about uniformity and also creation of an urge for better production, abolition of Girasdari and Barkhali system of land tenures was considered imperative. The Saurashtra Agrarian Reforms Commission appointed for the purpose, after taking the necessary evidence and a full study of the problem in the various parts of the State, recommended the abolition of certain tenures as a result of which the following enactments were passed.

The Saurashtra Land Reforms Act of 1951—This Act which ultimately put an end to the Girasdari system enabled the tenants to become the occupants of the land held by them on the payment of compensation to the Girasdars for the extinguishment of their rights. The Girasdars were allotted land for personal cultivation (Gharkhed). All cesses, *haks*, taxes, services, etc., by Girasdars were also abolished.

The Saurashtra Barkhali Abolition Act of 1951—According to the provisions of this Act, all rights, titles, or interests of the Barkhalidars in agricultural lands were brought to an end and occupancy rights were conferred on all the tenants without payment of any compensation to the Barkhalidars. Land was allotted to the Barkhalidars also for personal cultivation.

The Saurashtra Estates Acquisition Act of 1952—This act was the third and the last in the series of land reforms undertaken by the Government of Saurashtra, for the extinguishment of right, title and interests of the Girasdars and Barkhalidars in non-agricultural assets which vested in the State from a specified date. It also provided for the payment of compensation for the abolition of those rights.

The implementation of land reforms and the Barkhali Abolition Acts in Saurashtra was conducive to the solution of a number of knotty and difficult problems. It brought about equality of status among all holders of land by removing the former distinction of landlords and tenants. Peasant proprietorship bringing in its wake fixity of rent and uniformity of land tenure put an end to the former obnoxious position, whereunder the tiller of soil was a mere tenant-at-will subject to the payment of a high rate of assessment and numerous other levies. Girasdars and Barkhalidars who were allotted *gharkhed* land for personal cultivation, were enabled to rehabilitate their economy in the new social order, which tended to effect the former notion of superiority on the part of the feudal oligarchy. These reforms created a

favourable climate for the maximum utilisation of land resources by retaining the fruits of his labours with the tiller of the soil. All strata of the agricultural community enjoyed full and equal scope and opportunities for the betterment of their economic condition and contribute their mite to the general improvement of agriculture in the State.

The agrarian reforms initiated by the Government of Saurashtra were fully implemented with record time as will be seen from the fact that in 1961, there were 230 applications from Barkhalidars for grant of Gharkhed lands and all of them were disposed off. Occupancy certificates were granted to all the 2,874 tenants of Barkhalidars who had applied for it. Out of a total of 4,870 applications for occupancy certificates received from the Girasdars by December, 1955, 4,867 were disposed off. The number of pending applications was thus insignificant. Out of the total number of 6,071 Girasdari tenants who had applied for it occupancy certificates were issued to all but 17.

Other Measures—These principal measures of Land Reforms were accompanied by a number of ancillary measures which were no less important to stabilise the peasantry on land. These were :

(i) The Saurashtra Prohibition of Leases of Agricultural Lands Act of 1953 puts an end to absentee landlordism in any form by prohibiting leases of agricultural land except in case of military personnel, widows, minors, the infirm and the disabled.

(ii) The Saurashtra Prevention of Fragmentation and Regulation of Holdings Act was passed in 1954. It fixes the minimum area necessary for the profitable cultivation of a separate plot and limits the maximum size of a holding to three economic holdings which has been fixed at 32 acres for this district.

The Gujarat Agricultural Lands Ceiling Act, 1960, has also been made applicable to this district.

Bombay State Area (*Okhamandal*)

Okhamandal area of Baroda State merged into Bombay State in 1949, when *bhogami* (*khalsa*) and *salami* tenures were in force. The only villages held as jagirs were Navi Dhrevad and Positra. As seen earlier land tenures in vogue in this region had their origin in the exigencies of administration and the overriding considerations of political expediency. After

Independence and merger, in pursuance of its policy to remove all intermediaries the Government of Bombay applied (1) The Bombay Tenancy and Agricultural Lands Act, 1948, (2) The Bombay Merged Territories (Okhamandal Salami Tenure) Abolition Act, 1953 and (3) The Bombay Merged Territories (Jagirs) Abolition Act, 1953 to this area.

The Bombay Tenancy and Agricultural Lands Act, 1948—In the former Bombay province there was no special law regulating the relations between landlords and tenants. The relations between the two were mostly governed by mutual contracts or local usage and customs. The provisions of Section 83 of the Bombay Land Revenue Code, 1879 constituted the tenancy law of the State. With a view to safeguard the rights of tenants the first tenancy legislation, called the Bombay Tenancy Act, was enacted in 1939. This Act introduced a new concept of 'protected tenant' covering those tenants who held land continuously for a period of not less than six years. This Act gave to the tenants for the first time, fixity of tenure, a ceiling on rentals, rights in house sites and trees and protection from eviction under certain circumstances. In 1948, Bombay Tenancy and Agricultural Lands Act, 1948 was enacted to improve the conditions of tenants still further. This Act was made applicable to Okhamandal area soon after the merger of Baroda State.

Another important piece of legislation which proved to be a turning point in the position of tenants was the Bombay Act XIII of 1956, which provided that on the 1st April, 1957 described as the 'Tillers' day', every tenant whether permanent, protected or ordinary was deemed to have purchased from the landlord free of all encumbrances the land leased to him subject to the conditions that the tenant cultivated the land personally and his total holding did not exceed ceiling areas and the purchase price did not exceed 200 times the assessment. This Act was amended from time to time by the Bombay Acts XV and XXXVIII of 1957, LXIII of 1958, Gujarat Acts XVI of 1960 and XXVII of 1961.

Tenancy reforms provided for making the tenants occupants of land held by them as tenants and issue of occupancy certificates after full amount of purchase price was received and paid to the landlord in instalments ranging from 1 to 12. Under the aforesaid Act, landlords whose annual income was Rs. 1,500 or less and who held less than an economic holding were protected and the tenants of such persons did not become owners. Under the latest amendment made to the Act after the formation of Gujarat State, landlords who came under this exemption had a right of resumption for bonafide personal cultivation by applying to the Mamlatdars before 31st March, 1962 to establish their claim. In the event of their failure to do so, the tenants became the occupants in such cases also on payment of all the instalments payable towards the purchase price.

The following statement reviews the progress of implementation of the Act covering 992 cases and involving 1,266 tenants in *bhogami* or *khalsa* areas of the Okhamandal taluka.

Sl. No.	Section	No. of cases	No. of tenants	Land Acres-Guntha
	2	3	4	5
1	32-G Tribunal to issue notices and determine price of land to be paid by tenants	263	304	3,159-34
2	32-P Power of Collector to resume and dispose of land not purchased by tenant	239	280	2,936-26
3	32-F Right of tenant to purchase where landlord is minor, etc.	64	90	1,006-08
4	88-B Exemption from certain provisions granted to lands held by local authorities, universities and trusts	54	135	1,759-23
5	88-C Exemption from certain provisions in case of lands leased by a person with an annual income not exceeding Rs. 1,500	1	1	24-33
6	Miscellaneous cases where tenants are not merely tenants but are also occupants of land	371	450	4,816-29
	Total	992	1,266	13,766-32

Under Section 32-G the proceedings were conducted for 263 cases for the determination of the price of land payable by tenants whereas 286 tenants have refused to exercise their right to purchase, with the result that such land aggregating to 2,936·26 acres is in possession of the Collector. This land is disposed of by the Collector as follows. In 218 cases the land has been given to respective landlords to whom the land belonged for the purpose of cultivation. Proceeding for the disposal of 21 cases involving 325·05 acres are in progress.

The inquiries under Section 32-P of the Bombay Tenancy and Agricultural Lands Act authorising the Collector to resume and dispose of lands where the purchase of any land became ineffective were stayed in 1964, and the Act was amended to give one more chance to the tenants whose purchase had become ineffective on account of their refusal to purchase the land. One year was allowed to such tenants for exercising their rights to purchase. Similarly in cases where purchases had become ineffective for non-payment of the instalments of the purchase price, more time was also given to such tenants for paying up the instalments due. Proceedings for the disposal of six cases arising under this section are in progress. The tribunal has fixed Rs. 71,852·21 as the purchase price payable in all the

263 cases. Out of a sum of Rs. 62,127·98 recoverable till November, 1967 the amount actually recovered was Rs. 52,456·41. Those tenant-purchasers who are unable to pay the purchase price due to genuine inability have been advanced *tagavi* loans. Till November, 1967, a loan of Rs. 6,490·79 has been advanced to 140 tenants.

After the settlement of the relations of the landlords and tenants of *khalsa* lands under the Bombay Tenancy and Agricultural Lands Act, 1948, the Government of Bombay proceeded to settle the relations between the State and the tenure holders by enacting separate legislations for each non-ryotwari tenure. While abolishing these tenures, the tenure holders or others actually on the land are not dispossessed but are allowed to continue the same in their possession on/or without payment of occupancy price. The scope of the various tenure abolition laws enacted by the former Bombay State and the present Gujarat State has been restricted primarily to the abolition of various Inams and non-ryotwari tenures and to the conversion of lands held on these tenures into lands on the occupancy tenures recognised by the Bombay Land Revenue Code, 1879. On the abolition of special tenures the lands affected by the Abolition Acts became *khalsa* ryotwari lands liable to the payment of land revenue in accordance with the provisions of the Land Revenue Code. The implementation of the Land Tenure Abolition Acts in Okhamandal areas may be divided into two parts, viz., (1) disposal of the compensation cases, and (2) grant of occupancy rights conferred by law on tenants, etc.

The implementation of the Bombay (Okhamandal Salami Tenure) Abolition Act, 1953 and the Bombay Merged Territories (Jagirs) Abolition Act, 1953 which abolished the *salami* and jagir tenures in Okhamandal taluka are reviewed below.

The Bombay (Okhamandal Salami Tenure) Abolition Act, 1953—The *salami* tenure arose out of political conditions of Okhamandal and the independent temperament of the Vaghers and Vadhels inhabiting it. In 1861, Lieut. Barton who was placed in charge of Okhamandal deprived Vaghers of their *giras* possessions and pensionary allowances. Till now they used to cultivate their lands but under the new dispensation, they were made to pay a *salami* on any land allotted to them. Thus, came the *salami* tenure into existence.

The *salami* tenure did not cover the entire villages but scattered lands in Okhamandal taluka. The lands aggregated to 18,590·20 acres assessed at Rs 12,907·20 and were held by 36 tenure holders. After merger of the Baroda territory with Bombay State, in view of the changed political conditions and in pursuance of its policy of abolishing exemption from the payment of land revenue, the *salami* tenure was abolished by the Bombay

(Okhamandal Salami Tenure) Abolition Act, 1953, with effect from 1st August, 1954. It put an end to the exemption from the payment of land revenue so far enjoyed by the Vaghers who were recognised as occupants and made liable to payment of full assessment. However, taking into consideration the poor economic condition of Vaghers and the liability of the tract to recurrent scarcity, the then Government of Bombay had decided not to levy full assessment but only 4 annas (equal to 25 paise) per acre for a period of 5 years in the first instance. This concession has been gradually reduced and full assessment is recovered since 1964-65.

The Bombay Merged Territories (Jagirs) Abolition Act, 1953—The progress of implementation of the Act in the two jagir villages, viz., Navi Dhrevad and Positra is reviewed below.

Navi Dhrevad—The survey and settlement operations were completed and the assessment also fixed during the time of Baroda State. But the records of rights were promulgated in 1957-58. The total cultivable area in the village admeasures 2,364 acres and is assessed at Rs. 433·56, which is recovered in full since 1955-56. As the village has no inferior holders or tenants and all the land is in the occupation of the Jagirdar the question of payment of compensation does not arise.

Positra—The Act has been fully implemented in the village. The promulgation of records of rights took place in 1957-58. The total area of the village admeasuring 15,008·5 acres is assessed at Rs. 9,179·62. Under this Act the Government has acquired 7,616·5 acres of land for which a sum of Rs. 25,469·39 is payable by Government as compensation to the Jagirdar in the form of bonds. The land held by the Jagirdars comes to 216 acres assessed at Rs. 268·87. The land in possession of tenants admeasures 4,645 acres and is held by 140 tenants of whom 138 have acquired tenancy rights by paying Rs. 26,775·83. This amount has already been paid to the Jagirdar. The two tenants that remain have to pay Rs. 711·01 for the recovery of which necessary action is in progress.

Gujarat Agricultural Lands Ceiling Act, 1960—After the bifurcation of the State of Bombay into Gujarat and Maharashtra in 1960, the Government of Gujarat promulgated an important Act known as the Gujarat Agricultural Lands Ceiling Act in 1960 with a view to fixing a ceiling on land holdings and to provide for the acquisition and disposal of surplus agricultural lands The area of the State was divided into different classes and a ceiling area was prescribed for each of them. No person is entitled to hold whether as owner or tenant land in excess of the ceiling so prescribed. The excess land thus acquired by Government was paid for according to its assessment value which was different for different classes of lands.

The classes of land and the ceilings prescribed for each are indicated below.

Ceilings Prescribed for Different Classes of Land

Class of local area	Ceiling area in acre			
	Dry crop land	Rice land	Seasonally irrigated land	Perennially irrigated land
1	2	3	4	5
Class A	56	38	38	19
„ B . ..	60	40	40	20
„ C	72	48	48	24
„ D	80	54	54	27
„ E	84	56	56	28
„ F	96	64	64	32
„ G	108	72	72	36
„ H	120	80	80	40
„ I	132	88	88	44

All lands in the village of Jamjodhpur taluka and 2 villages, viz., Amran and Chovishi of Jodiya mahal are grouped under 'F' class, lands in the villages of Kalavad taluka are grouped under 'G' class, and lands in the remaining talukas of the district are grouped under 'H' class. The ceilings prescribed for these areas are shown in the above schedule.

As a majority of landholders in this district are small cultivators, not much surplus land could be acquired in this district under this Act. By February 1967, only 2,356 acres of land were declared surplus in 139 cases. Of these, possession of land has been taken over in 127 cases. Land thus acquired has been leased on *ek-sali* basis. A sum of Rs. 55,890 has been fixed by way of compensation in 10 cases

SURVEY AND SETTLEMENT

In the pre-integration period the Nawanagar State and Baroda State had undertaken survey and settlement operations The survey and settlement

operations in Nawanagar State were started as far back as 1899. The original survey which was started in 1899 was completed in 1916. The revision settlement commenced in 1923 and was in progress till 1947. The original survey settlement in Okhamandal was made in 1894. The revision settlement was made in 1928. In other areas comprising the territories of present Jamnagar district systematic survey and settlement operations were not undertaken.

Survey Operations—Much remained to be done to bring the land revenue system on par with the areas formerly included in British districts. Survey and settlement operations had to be carried out. Unsurveyed lands had to be surveyed, and surveyed lands had to be resurveyed to confirm to new standards. Soil had to be classified, and settled on scientific basis so as to remove existing disparities in the rates of assessment and bring down the incidence of land revenue to a reasonable level. To this end, the State of Saurashtra set up a separate Department of Survey and Settlement under the Director of Land Records and Settlement with Superintendent of Survey in charge of survey operations and District Inspectors of Land Records in charge of survey and land records of districts.

The district of Jamnagar (formerly known as Halar) which comprised 689 villages prior to 1st July, 1959 now consists of 720 villages distributed in 10 talukas. As already seen earlier and detailed in Statement X.1, appended at the end of the Chapter, the survey operations which were started in Nawanagar State in 1897 were completed in as many as 441 villages by the year 1905, and the rest of the villages were covered during the period that followed. The survey operations in non-*khalsa* villages of Nawanagar, were, however, carried on after merger and completed between 1950 and 1959. As the survey operations were not introduced in the former State of Dhrol, it was started in 1950 and completed by 1953 by the Government of Saurashtra. The Okhamandal areas were surveyed between 1894 and 1896. It is also found that revision surveyed operations were for the most part carried out by Nawanagar and Baroda States between 1925 and 1930.

The method of survey used during the princely regime except in the case of the former Baroda State areas was to have a traverse laid down on the village boundaries with the help of theodolite then to have an *adhar* line and one or two supplementary *adhar* lines and then to do detailed survey of each field by chain and cross-staff method. The areas of each survey number and its subdivisions and for each class of land comprised therein were separately entered in the land records under an indicative number, i.e., survey number, the numbering of subdivisions being subordinate to the number of parent survey. In the case of former Baroda

State areas, the method of survey adopted was that of *chok mapni* system, according to which the whole area to be surveyed was laid down in the chock of 32 chains, which were further subdivided into smaller blocks of 4 by 10 chains, each chain being equal to 80 feet. The rest of the method was the same as above. All the unsurveyed areas have since been surveyed and no area in this district now remains unsurveyed.

Classification of Soils—Soils of villages of the former Nawanagar (Jamnagar) and Baroda States which are included in this district were classified during the former States regime. The soil classification system followed in the former Baroda State area was the same as the Gujarat classification system. The main classes of land as recognised for classification in the former Nawanagar State villages were (1) *jirayat* (dry crop) and (2) *peet* (irrigated), which generally corresponds to the Gujarat soil classification system except in respect of sub soil factor. For, instead of adding sub soil classification value and assessment, *kos*-rate was applied to the lands under well irrigation in that State.

For the villages of the various former States (Dhrol State and Dhrafa Thana) which were not classified, the Land Records Department of the former Saurashtra Government evolved, in the year 1956, a system of classification which though mostly analogous to the Gujarat classification system differs slightly from it in respect of soil classes and details of sub soil classification and average classification values. Instead of working out average classification value for each survey number or its subdivision, the areas with different classification values in the same survey number or subdivision are reduced into area of 16 annas classification value. Unlike Gujarat classification system, well irrigated lands according to Saurashtra classification system are treated as *bagayat* lands. The sub soil classification system is more or less similar to that of Gujarat classification system. It, however, differs from the latter in so far as the sub soil classification scale is not related to soil classification values of all the lands in the zone or 'Vaga' but adjudged to this facility on the basis of 3 or 4 acres of land, which are considered irrigable from one *kos* or waterbag from the existing wells.

The above system of classification is continued after the reorganisation of States for villages where soils are not classified before, or for villages where the soils, though classified before, are required to be re-classified. However, where soils of a part of a village are classified before and those of the remaining part are to be classified, the system followed in the classified part of the village is adopted for the rest of the village to maintain uniformity. As far as this district is concerned the work of survey and classification is completed in all the villages. No original survey work remains to be done now.

Assessment and Settlement—The position regarding settlement of the villages in the district is as under.

Sl. No.	Taluka	No. of villages classified after 1948 as per Saurashtra Classification Rules	No. of villages	Year of original settlement	Year of revision settlement
1	2	3	4	5	6
1	Jamnagar	15	89	1925	1930
2	Dhrol	41	1	1911	..
3	Kalavad	46	58	1915	1945
4	Jodiya	8	46	1911	1943
5	Khambhalia	13	75	1917	..
6	Jamjodhpur	30	41	1909	1943
7	Kalyanpur	5	61	1914	..
8	Bhanvad	14	57	1910	1943
9	Lalpur	14	62	1913	1947
10	Okhamandal	..	44	1894 to 1806	1928
	Total	195	534		

As the pitch of assessment of land revenue in Saurashtra was considered higher than of areas similarly settled in the former Bombay State, the Government of Bombay sanctioned with effort from 1958-59, remission of assessment in excess of the rates of assessment obtaining in the Comparable Union Areas (formerly comprising areas of pre-reorganised State of Bombay) and allowed assessment to continue as it was where it was lower.

The above orders were issued in respect of the villages which are deemed settled under Section 117-R of Bombay Land Revenue Code as adopted in Saurashtra. For other villages and the areas not so deemed settled, Government of Bombay framed rules under Section 52 of Land Revenue Code for achieving the same object. According to this rule the villages to be dealt with were to be formed into homogeneous groups as far as possible in respect of (i) physical configuration, (ii) climate and rainfall, (iii) prices, and (iv) yield of principal crops. For each of these groups some analogous area of the State of Bombay was to be ascertained, to which the group could be compared on the basis of homogeniety of soil and crop pattern. The respective rates of assessment of dry crop and rice lands in each group were to be fixed by the Collector having regard to the respective rates of assessment of such classes of land prevailing in the comparable Union Area. For lands irrigated by wells, the rate of assessment per acrè was not to exceed 20 times the rate for lands classed as dry crop in the same group ; and for lands irrigated from tanks or canals,

the rate was not to exceed two times the rate fixed for land irrigated by wells in the same group as stated above, while fixing these rates, the Collector was to have due regard to the rate or amount of assessment payable at the time in respect of the land, or holding as the case may be.

Where lands were classified, rates were fixed per acre of 16 annas value in the particular sub-class. In the case of an individual survey number or its subdivisions, the rate was based on the quality of the land in terms of the best land of sixteen annas in quality. Where the lands were not classified, the rule provided for classification of lands into dry crop, rice and irrigated and for further sub-classification of each of these classes into good, medium or inferior on a consideration of the yield of the principal crops produced and the classification that may have already been adopted for the purpose of fixation of *udhad* or *vighoti* after integration.

The rates of assessment fixed under this rule were to remain in force for ten years from the revenue year from which rates so fixed were applicable or till the lands were settled under Chapter VIII-A of the Land Revenue Code, whichever was earlier.

REVENUE ADMINISTRATION—The revenue administration is being looked after at present by the Collector and District Development Officer at the district level. Prior to the implementation of the Gujarat Panchayats Act, 1961, in 1963 the hierarchy of revenue officials consisted of the Prant Officer or Deputy Collector in charge of a subdivision, Mamlatdar or Mahalkari in charge of a taluka/mahal, with Circle Inspectors and Talatis functioning at the lower level. Since the implementation of that Act, the work of collection of land revenue has been entrusted to gram and nagar panchayats. The Taluka Development Officer has all the powers over the subordinate revenue officials in matters of revenue collection as the Mamlatdar had prior to the implementation of the Act. The Circle Inspector works under his direct control and is also responsible for the work of the Talati-*cum*-Mantri who looks after collection of revenue and maintenance of records. There are 26 Circle Inspectors in the district of whom 13 work under the Collector and 13 under the District Development Officer. Their work is also supervised by District Inspector of Land Records in matters relating to maintenance and repairs to boundary marks, crop inspection and Government waste lands.

Functions of the Land Records Department—The Land Records Department in Saurashtra was created in the year 1949 and integrated with Bombay State Land Records Department in 1956. It is now a separate department of Gujarat State and is an adjunct to the Revenue Department. At the State level the department is headed by the Settlement Commissioner and Director of Land Records. For administrative purposes, the State is

divided into circles each in charge of a Superintendent of Land Records, who has under him Inspectors of Land Records functioning at the district level.

The functions of the Department of Survey and Settlement are (1) to maintain all survey, classification and settlement records up to date by keeping careful notes of all changes, and for this purpose to carry out field operations preliminary to incorporation of the changes in the survey records, (2) to collect and provide statistics necessary for the sound administration of all matters connected with land, (3) to help reduce, simplify and cheapen litigation in revenue and civil courts by providing reliable survey and other records, (4) to supervise the preparation and maintenace of Records of Rights and, of the periodical inspection of boundary marks, (5) to conduct periodical revision and settlement operations, (6) to organise and carry out village site and city surveys on an extensive scale and arrange for their proper maintenance, (7) to undertake special surveys for private individuals and public bodies (such as survey of Inam and other non-*khalsa* villages and lands)[1] surveys in connection with railways, municipal and local projects, town planning schemes, and survey for the Defence and other Government departments, (8) to maintain up to date village, taluka and district maps, reprint them and arrange for their distribution to various Government departments for administrative purpose and sale to the public, and (9) to train revenue officers in survey and settlement matters.

The District Inspector of Land Records, Jamnagar is the principal officer in charge of the Land Records Department in the disrict. He is a gazetted officer (of a Mamlatdar's rank) appointed by the Settlement Commissioner and Director of Land Records, Ahmedabad and is directly subordinate to the Superintendent of Land Records, Rajkot Circle, Rajkot, in all technical matters. He is also subordinate to the Collector of Jamnagar and has to carry out all administrative orders of the Collector in the matter of survey and land records. He is assisted by (a) one District Surveyor and ten surveyors, (b) one Headquarters Assistant, (c) one Record Keeper, and (d) other administrative staff.

City and Villages site Survey—The survey work of Jamnagar city was completed in 1918 during the time of Nawanagar State, but there was no village site survey in the district. The inquiry work of Jamnagar city was completed in the year 1958-59. The work of regular maintenance of city survey records was started in 1961 under the City Survey Superintendent, Jamnagar.

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1. The only non-*khalsa* areas that now exist after the implementation of agrarian reforms are *inam* lands.

The city survey of Dwarka was started from 5th March, 1964 and was completed on 30th June, 1965. Its inquiry work is in progress. The theodolite survey of Khambhalia town was started on 1st December, 1965 and completed on 28th February, 1966.

Special Staff—In addition to the normal set-up of the department there is a separate staff for original and revision survey and classification of soils in the areas unsurveyed, if any, or are due for revision survey. After the integration of Saurashtra State into the bigger Bombay State, the post of Superintendent of Land Records, Rajkot was created for land records work in that region and the special survey and classification staff working under Survey Mamlatdars was also placed under him. Later on, when the scheme of survey and classification in Saurashtra and Kutch was included in the Second Five Year Plan, the working of the entire scheme in these areas was transferred to a separate Superintendent of Land Records, Rajkot, specially appointed for the purpose.

Record of Rights—The Record of Rights was introduced *pari passu* with other measures in all the talukas and mahals which were so far unsurveyed. The areas adopted for the purpose were entered in the village records as per *vahivat* or customary usage. These records are prepared and maintained by the staff of the Revenue Department After survey, the Land Records Department supplies the *mapni* or survey register and map to the revenue officials for compilation of the Record of Rights. According to Section 135-B (1) of the Land Revenue Code, the Record of Rights contains the followings particulars ; (a) name of all persons who are holders, occupants, owners or mortgagees of the land or assignees of the rent or revenue thereof : (b) the nature and extent of the respective interest of such persons and conditions or liabilities attached thereto ; (c) rent or revenue, if any, payable by or to any such persons ; and (d) such other particulars as the State Government may prescribe under rules made in this behalf. The State Government has now applied the law to all tenancies also under Section 135 (b) (2), any acquisition of right in land is to be reported to the village officer by the persons acquiring it, unless it is registered under Land Revenue Code Section 135 (c).

Village maps are drawn for all the surveyed villages showing survey numbers, their boundary marks and other topographical details such as roads, rivers, nullahs, forests, hills, from the detailed *tippans* of individual survey numbers. They are generally drawn on a scale of 1"=20 chains= 1 furlong or 201·17 metres. From these village maps, taluka and district maps are constructed either on a scale of 1"=2 miles or 1"=4 miles. A district map requires frequent revision due to territorial changes and development works such as construction of new roads, canals, railways, hospitals, *bundhars*, dams, etc., undertaken under various plan schemes.

INCOME FROM LAND REVENUE AND SPECIAL CESSES CONNECTED WITH IT—Land revenue is one of the important sources of income in the district. The Statement X.2 shows the demand and collection of land revenue since 1962-63.

STATEMENT X.2

Land Revenue Demand, Collection, etc., (1962-63, 1963-64 and 1964-65)

		1962-63	1963-64	1964-65
1	Demand	Rs. p.	Rs. p.	Rs. p.
	(a) Current	3,137,065.56	3,237,438.05	4,424,194.23
	(b) Arrears	1,070,321.30	1,267,051.63	2,973,952.70
	Total	4,207,386.86	4,504,489.68	7,398,146.93
2	Collection	2,928,918.35	1,524,639.58	5,691,612.66
3	Remission	11,416.88	8,250.48	59,361.15
4	Suspension	115,799.06	1,488,718.19	197,417.63
5	Percentage of collection	69.61	33.85	76.93

Source:
The Collector, Jamnagar district, Jamnagar

The statement shows a general trend towards increase of gross consolidated original demand The increase, however. is more pronounced in 1963-64 and 1964-65 as compared to the previous years 1962-63 and 1963-64, due to variation in demand, resulting from good or bad agricultural season, failure of crops, etc.

Local Fund Cess—The Saurashtra Local Development Fund Act was enacted in 1956. Section 4 of the Act provided for a levy of a cess at the rate of three annas (equal to 19 paise) on every rupee of land revenue payable by an occupant. The Act established a fund known as the Local Development Fund to which the amount of cess realised was credited. The Government of Saurashtra used to allot to every district panchayat such sums as it deemed fit out of this fund. This cess was continued after the integration of Saurashtra into Bombay State. Later on when the District Panchayats were renamed District Local Boards in 1960, consequent upon the application of the Bombay District Local Boards Act of 1923 by the Government of Bombay, this cess was continued to be levied under Section 93 of that Act. It was formerly collected by the Government along with land revenue. But after the implementation of the Gujarat Panchayats Act. 1961, it is levied by the panchayats, as the function of collecting land revenue and local fund cess has been transferred to the panchayats in 1963. This cess which was first levied at the rate of 20 paise on every rupee of land revenue is now recovered at the enhanced rate of 50 paise since 1st July. 1966 under Section 169 of the Gujarat Panchayats Act.

The amount realised by way of local fund cess, in the district was Rs. 498,620·96 in 1962-63, Rs. 530,423·45 in 1963-64 and Rs. 530,890·94 in 1964-65.

The gram/nagar panchayat also after obtaining permission of the State Government levies a cess which is different from local fund cess at a rate not exceeding 25 paise in a rupee payable to State Government as land revenue. This cess can be increased up to 100 paise under certain circumstances for undertaking certain specified works or projects for the benefit of the community under sub-Section 2 of Section 181 of the Gujarat Panchayats Act.

Irrigation Cess—A irrigation cess was hitherto collected only on the areas actually irrigated. But since the application of the Irrigation Act, irrigation cess at the rate of Rs. 2-50 per acre is being levied from the year 1964-65 on all lands in irrigable command in irrespective of the fact whether water is taken or not with a view to induce recalcitrant cultivators to take up irrigation. The total collection of this cess in 1965-66 was Rs. 35,826·19 against a total demand of Rs. 53,135·57.

Education Cess—In order to provide for increasing expenditure on education, it was considered necessary to raise additional resources and provide for carrying the proceeds thereof to a separate fund created for the purpose. The Gujarat Education Cess Act, 1962 was, therefore, enacted and brought into force from 1st August, 1962. Under this Act, the cess is levied as follows.

(1) A surcharge at the rate of 20 paise on every rupee of land revenue on all lands assessed or held for the purpose of agriculture.

(2) Surcharge at rates varying from 12½ per cent to 75 per cent on all unalienated and alienated lands used for non-agricultural purposes.

(3) Tax on lands and buildings in the urban areas at varying rates based on their letting value.

The surcharge levied on agricultural as well as non-agricultural land is transferred at the end of the year to the State Education Cess Fund and utilised on schemes for promotion of education in the State. During 1963-64 Government has directed that one-third of the tax collected on lands and buildings within the municipal area should be given to the municipalities as grant with effect from 1st August, 1962, the date from which the tax has been levied. Against a total demand of Rs. 894,259 a sum of Rs. 738,769 was collected as education cess in the district during the year 1964-65.

The Bhoodan Movement—The Bhoodan or voluntary land gift movement was conceived by Acharya Vinoba Bhave early in 1951 when he was touring Telengana region in the State of Andhra Pradesh, where acute agrarian unrest was caused by land hunger on the part of cultivators. In appealing to the landlords for donation of land, Acharya Vinobaji has been applying the Gandhian principle of peaceful persuasion.

Describing the aims of the movement, the Acharya observed : "In a just and equitable order of society land must belong to all. That is why I do not beg for gifts but demand a share to which the poor are rightly entitled."[1]

The main objective of the movement is to "propagate the right thought by which social and economic maladjustments can be corrected without serious conflicts." He describes the Bhoodan movement as a kind of *satyagraha* or peaceful revolution.

The Bhoodan movement sponsored by Vinobaji was initiated in this district and other districts of Saurashtra as early as 1953. As the existing laws and rules prohibited the transfer of cultivable lands gifted by the donors in Bhoodan, the Government of Saurashtra enacted a special law, viz., the Saurashtra Bhoodan Yagna Act, 1953, to facilitate the donation of land in Bhoodan for settling landless persons on land.

Till 1965-66, 9,839 acres of land were donated in the district out of which Government contribution is 8,201 acres and that of individual landholders 1,638 acres.

Rural Wages—There is a large number of persons in this district who possess no land of their own but depend upon agriculture for their livelihood. They are labourers who are employed to work on the field either casually during harvesting season or throughout the year as *sathi* or annual workers. According to the 1961 Census 165,237 persons in the district were returned as cultivators and 19,161 as agricultural labourers, the latter constituting 11·60 per cent of the former. This section analyses the difference in the wages earned for the different operations in which they are engaged. A comparison of wage rates prevalent in pre-war, post-war and present times is also attempted.

Most of the landholders employ casual field labourers only when there is a rush of work on the farm and pay them on daily basis. Agricultural operations such as ploughing which entail more strenuous labour command a higher wage rate. While much of the heavy work is done by men, women

1. VINOBA BHAVE, *Bhoodan Yagna*, p. 29

and children are employed in such work as weeding, winnowing, watering, etc. They are usually paid in cash and some time in kind. The daily wage rates have increased considerably in recent years compared to pre-war and post-war years. In most of the talukas the increase is not less than three-fold. In some it is even more. In Kalavad taluka, for example, the rates for plouging, harrowing, sowing, etc., have increased from Re. 0·15 in 1938-39 to Rs. 1·50 in 1964 thus recording a ten-fold increase in the wage rates. Devaluation of rupee in June, 1966 led to a further rise in prices of agricultural commodities and consumer goods which in turn affected the level of wage rates in the district. The statement that follows compares the rates prevalent in pre-war and post-war years in different talukas of the district.

STATEMENT X.3

Wages of Agricultural Operations (for males) in the Talukas of Jamnagar District for the Years, 1939, 1949 and 1964

(in Rs.)

Sl. No.	Taluka	Ploughing, harrowing, carting, etc.			Harvesting of crops		
		1939	1949	1964	1939	1949	1964
1	2	3	4	5	6	7	8
1	Jamnagar	0.25	1.50	5.00	0.12	1.00	3.00
2	Dhrol	0.37	1.50	2.50	0.25	2.00	2.50
3	Jodiya	0.25	1.00	3.00	0.25	1.00	3.00
4	Kalavad	0.15	0.50	1.50	0.25	0.75	3.00
5	Lalpur	0.25	1.00	1.50	0.75	0.75	1.00
6	Jamjodhpur	0.75	4.00	5.00	0.90	4.25	6.00
7	Okhamandal	0.75	1·50	3.00	0.87	1.62	3.25
8	Kalyanpur	0.50	0 75	2.50	0.50	0.75	2.50
9	Khambhalia	2.00	2.00	3.50	1.50	3.00	4.00
10	Bhanvad	0.50	2.00	3.50	0.75	2.50	4.00

Sl. No.	Taluka	Threshing out grains			Other miscellaneous works		
		1939	1949	1964	1939	1949	1964
1	2	9	10	11	12	13	14
1	Jamnagar	0.12	1.00	3.00	0.25	1.75	5.00
2	Dhrol	0.37	2.00	2.50	0.50	2.00	3.00
3	Jodiya	0.25	1.00	3.00	0.25	1.00	3.00
4	Kalavad	0.20	0.60	2.50	0.50	0.75	4.00
5	Lalpur	0.40	0.60	2.00	1.00	1.50	3.00
6	Jamjodhpur	0.75	4.00	5.30	N.A.	N.A.	N.A.
7	Okhamandal	0.75	1.50	3.00	N.A.	N.A.	N.A.
8	Kalyanpur	0.50	0.75	2.50	0.50	0.75	2.50
9	Khambhalia	2.50	3.00	3.50	3.00	2.00	3.50
10	Bhanvad	0.50	3.00	3.50	0.75	2.50	4.00

N. A. = Not available

Source :

Taluka Development Officers, Jamnagar District, Jamnagar

The current rates in the district vary according to the demand and supply of labour and the proximity of the place from towns. Labourers who are nearer the towns prefer to go and work there instead of bargaining for a low wage in their own village. This tendency is, however, confined to male labourers only, as females rest content with whatever little they get at their own place. Their wage rates have increased from Re. 0·15 to Rs. 2·00 in pre-war years and varied from Rs. 2·50 to Rs. 5·00 in 1964-65.

Casual labourers work from sunrise to sunset with a break of about two hours for lunch at noon. Sometimes during harvesting periods they work even more and are also paid more. The main source of labour is the village itself, though at the time of harvesting, labourers from surrounding villages are also called to meet the local shortage. During the agricultural season, artisans, cowherds, shepherds, Harijans, Kolis, non-agricultural labourers and small cultivators who usually do not find enough employment on their farms offer themselves for work as field labourers during the peak period. Field labour being seasonal they have to seek alternate employment during the off season. Such work includes collecting and selling of firewood, hay-making, making of tiles, spinning, weaving, etc.

Harvesting of crops like *bajri*, *jowar*, groundnut and wheat is some times given on contract basis. The system is known as *udhad* wherein labourers are paid a certain quantity of grain for harvesting a particular piece of land. Harvesting of sugar-cane is either on daily wage system or on contract basis. Labourers engaged in preparing *gur* are known as *bhurias* and are paid between Rs. 4 to 5 per day. A more important function is performed by a *galara* who actually supervises the *gur* making process and prepares it after the sugar-cane juice is boiled. Being an experienced and skilled labourer, a *galara* gets higher wages than others. Besides cash payment, labourers working at *gur* making get meals, tea, *bidis* and also *gur* and sugar-cane.

Those cultivators whose holdings are large enough to provide continuous and regular employment for the whole year engage annual servants also. They are known as *sathi*. A *sathi* binds himself to do all type of farm work, and is available the hours of day and night. The contract is entered into generally for one year and renewed year after year with the consent of the parties. In addition to cash remuneration a *sathi* is provided with other facilities such as food, clothing, shoes and residential accommodation. Normally payment to a *sathi* is made at the end of the year, but when necessity arises, he is given small amounts of money occasionally by way of part payment. The annual wages paid to *sathis* varied from Rs. 80 per year during pre-war years to Rs. 500 during post-war years and rose to Rs. 900 in 1964 and more in many talukas.

Artisans—Such village artisans as blacksmiths, carpenters, cobbleres, etc., are closely and actively connected with the cultivators at various stages of agricultural operations. Valand (barber) and kumbhar (potter) also render certain services to the agriculturists. All these are paid annually in kind at the harvest time, though the former system of payment in kind is generally disappearing and many farmers now pay in cash. The commodities given by way of wages include foodgrains, pulses and some times a bundle of fodder and seasonal vegetables.[1]

REGISTRATION

Registration of Documents—Under Section 17 of the Indian Registration Act (XVI of 1908), registration of certain documents is made compulsory and optional in case of certain others under Section 18. As a rule, fees are levied for the registration of all documents, but the State Government has exempted co-operative societies registered under the Gujarat Co-operative Societies Act, 1961 from payment of such fees. Certain types of societies enjoy restricted exemption in respect of certain documents involving consideration up to a prescribed limit, fees being charged for the registration of documents with higher consideration.

Marriages under Special Marriage Act, Indian Christian Marriage Act and the Parsee Marrige Act are also registered.

Registry Offices—There were 10 Sub-Registries in the district up to 31st October, 1962, viz., Jamnagar, Jamjodhpur, Kalavad, Bhanvad, Dwarka, Khambhalia, Kalyanpur, Lalpur, Jodiya and Dhrol. Of these first five were under full-time Sub-Registrars and the rest under Treasury Aval Karkuns of the taluka who were appointed *ex-officio* Sub-Registrars. From 1st November, 1962, offices having lighter work were merged with the neighbourings Sub-Registry offices working under the departmental Sub-Registrars. There are now six Sub-Registries under full-time Sub-Registrars at (1) Jamnagar (2) Kalavad (3) Jamjodhpur (4) Khambhalia (5) Kalyanpur and (6) Jodiya. The offices at Lalpur, Bhanvad, Dwarka and Dhrol were merged respectively with the offices of Jamjodhpur, Khambhalia, Kalyanpur and Jodiya Sub-Registrars. For the convenience of public the Sub-Registrars of the main offices visit the former stations for registration purposes on the days fixed by Government.

District Registrar—The Collector is the *ex-officio* District Registrar. He exercises powers of supervision and inspection over the entire registration staff in the district. Though the Sub-Registrars are appointed by the

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1. The details of the wage rates prevalent in the district for the years 1963 to 1967 are given in Statements VIII.23 to 26 in Chapter VIII—Economic Trends.

Inspector General of Registration, the District Registrar has powers to fill in temporary vacancies. He hears appeals and applications preferred to him under Section 72 and 73 of the Indian Registration Act, 1908 against refusals to register documents by the Sub-Registrars subordinate to him. Under Sections 25 and 34 of the Act, he is also empowered to condone delays in presentation of documents and appearance of executants provided the delay does not exceed four months, and direct such documents to be registered on a payment of a fine, not exceeding ten times the prescribed registration fees. He is also competent to order refund in case of surcharges and to grant full or partial remission of safe custody fees in suitable cases. Under Section 42 of the Act a will or codicil may be deposited in a sealed cover and it may be got registered at the cost of the party desiring it after the depositor's death. He is also authorised to record and register births and deaths under the Births, Deaths and Marriages Registration Act (VI of 1886).

Sub-Registrar—The main functions of the Sub-Registrar are to register documents, keep a record of all documents registered and to send to officers concerned extracts from documents affecting immovable property in respect of which a record of rights is maintained. Every Sub-Registrar is an *ex-officio* Sub-Register for the registration of births and deaths. He is also *ex-officio* Registrar under Parsee Marriage and Divorce Act, 1936. The Sub-Registrar working as Headquarters Sub-Registrar at Jamnagar is also the Marriage Officer for the Jamnagar district and is vested with the powers of solemnising and registering marriages under the Special Marriage Act, 1954.

The Headquarters Sub-Registrar, Jamnagar, assists the Collector in adjudication of documents impounded under Section 33 of the Bombay Stamp Act, 1958 (IX of 1958) and also in the adjudication of cases under Section 31 of the Bombay Stamp Act, 1958.

Statistics—The average annual income of the Registration Department in Jamnagar district was Rs. 116,025 and the annual expenditure was Rs. 13,612 for the year 1964-65. Copying of documents is done by hand in all offices. Out of 7,305 documents registered in the district 7,135 documents falling under compulsory registration were of the aggregate value of Rs. 25,273,631 : 13 documents falling under optional registration were of the aggregate value of Rs. 8,767 ; 33 documents affecting movable property were of the aggregate value of Rs. 81,766 and 124 were wills.

Stamps

The Superintendent of Stamps is the authority controlling the supply and sale of State stamps. The Collector as the administrative head of the district is in charge of the entire work relating to stamps. As there is no treasurer in the treasury, the work of sale of stamps to vendors and to the public is done

by a Deputy Accountant who is also an *ex-officio* stamp vendor under the direct supervision of the Treasury Officer. He is in charge of the local depot at Jamnagar and responsible for the maintenance of the stock of stamps, their distribution to the branch depots in the district and also for their sale to the public. Refund of value of unused, spoiled and obsolete stamps is not ordered by the Treasury Officer, as these powers are not delegated to him after the separation of the Treasury from Revenue, but this power is exercised by the Collector, Deputy Collectors, Mamlatdars and Mahalkaris. A branch depot is located at every taluka headquarters and is in charge of a Sub-Treasury Officer, i. e., the Mamlatdar.

For the convenience of the public, stamps are sold not only at the district depot and branch depots but also at various other centres by licenced stamp vendors appointed by the Collector. There are 37 such stamp vendors in the district. The non-judicial stamps in case of instruments requiring stamp duty of the value exceeding Rs. 150 and the court fee stamps exceeding Rs. 125 are sold directly to the public by the Treasuries and Sub-Treasuries. Stamps below these denominations are sold by authorised vendors. The Sub-Treasury Officers act as *ex-officio* stamp vendors by virtue of their post. From 5th June, 1965, non-judicial stamps up to Rs. 250 are being sold by the stamp vendors.

The total income realised from the sale of stamps in Jamnagar district in the year 1965-66 was Rs. 1,132,265·25 for non-judicial stamps and Rs. 309,936·30 for judicial stamps. The vendors are allowed a small discount which in the year 1965-66 amounted to Rs. 14,816·60 for non-judicial stamps and Rs. 1,525·71 for judicial stamps.

OTHER SOURCES OF REVENUE

In order to meet the growing expenditure on developmental activities the State and the Central Governments have to augment their financial resources by tapping additional sources of revenue, besides land revenue. The most important in these days are Income-tax, Sales Tax, taxes on Motor Vehicles, State excise, Central excise, etc. These will be examined below in brief.

Sales Tax—Sales Tax was first introduced in Saurashtra in June, 1950. It provided for the levy of a single point tax at the last stage. With the formation of bilingual Bombay State, it was found that differnt systems of sales tax existed in different regions of the State. In order that a uniform system of sales tax may be evolved and applied to all the parts of the integrated State, the Government of Bombay appointed the Sales Tax Advisory Committee which recommended a composite system of sales tax. The Bombay Sales Tax Act, 1959 which was enacted in pursuance of its recommendations came into force from 1st January, 1960. It is this Act which

is at present (from 1st May, 1960) adapted and implemented by the State of Gujarat.

The total collection of Sales Tax under the Bombay Sales Tax Act, 1959, Central Sales Tax Act, 1956 and Motor Spirit Taxation Act, 1958 in Jamnagar district came to Rs. 4,915,060 in 1964-65 and Rs. 5,843,914 in 1965-66.

Taxes on Motor Vehicles—Tax on motor vehicles constitutes one of the important sources of State revenue. The Motor Vehicles Department is responsible for the proper administration of the Motor Vehicles Act, 1939 and Rules made thereunder. It also collects taxes on motor vehicles and passengers and goods carried by road under (i) the Bombay Motor Vehicles Tax Act, 1958, (2) the Bombay Motor Vehicles (Taxation of Passengers) Act, 1958, and (3) the Gujarat Carriage of Goods Taxation Act, 1962. It also carries out in general the duties and responsibilities cast on it under the provisions of the said Acts and Rules made thereunder.

The Department is headed by the Director of Transport with headquarters at Ahmedabad. From October, 1963, the State has been divided into 3 regions, viz., Ahmedabad, Baroda and Rajkot. Accordingly there are 3 Regional Offices each of them being headed by a Regional Transport Officer. The Jamnagar district is under the Rajkot region which comprises the revenue district of Rajkot, Jamnagar, Junagadh, Surendranagar, Bhavnagar, Amreli and Kutch.

The net collections of revenue[1] realised for the district of Rajkot, Jamnagar and Junagadh along with Kodinar taluka of Amreli district for the year 1965-66 was as under :

	Name of the Act	Amount Rs.
1	Indian Motor Vehicles Act, 1939	280,342·65
2	Bombay Motor Vehicles Tax Act, 1958	6,291,124·63
3	Fees and other receipts	4,753.55
4	Bombay Motor Vehicles Act, 1958 (Taxation of Passengers) ..	349,252·55
5	Gujarat Carriage of Goods Taxation Act, 1962	1,328,897·52
	Total	8,254,370·90

State Excise—Excise or *abkari* revenue is one of the sources of State income, though not an important one in view of the policy of total prohibition adopted by the Government of Gujarat. The Prohibition and Excise Department in the district is responsible for the administration of the Bombay Prohibition Act, 1949, the Bombay Opium Smoking Act, 1936, the Bombay Drugs (Control) Act, 1959, Dangerous Drugs Act, 1930,

1 Separate figures by District are not available.

Medicinal and Toilet Preparations (Excise Duties) Act, 1955, and Spirituous Preparations (Inter-State Trade and Commerce) Control Act, 1955. The District Inspector of Prohibition and Excise, Jamnagar who is in charge of this work in the district, works under the supervision and control of the Collector. He has under him two Sub-Inspectors, one stationed at Jamnagar and the other at Khambhalia. Besides, he has under him, a Sub-Inspector in charge of Bonded Laboratory, viz., United Chemical and Pharmaceutical Works, Jamnagar.

The State Government levies duty on the following commodities under Section 105 of the Bombay Prohibition Act, 1949.

1 Any alcoholic preparation for human consumption

2 Any intoxicating drug and hemp

3 Opium

4 Any other excisable article as defined in clause (13) of Section 2 of Bombay Prohibition Act, 1949.

In addition to the above articles, excise duty on medicinal and toilet preparations containing alcohol, opium and narcotics is levied under the Medicinal and Toliet Preparations (Excise Duties) Act, 1955 by the Central Government but collected by the Prohibition and Excise Department of the State and retained by the State Government.

Excise duty on various alcoholic preparations brought to the district a total revenue of Rs. 119,989 in 1963-64 and Rs. 129 777 in 1964-65.

Central Excise—The Central Excise administration in the whole of Jamnagar district is vested in the Superintendent of Central Excise, Jamnagar. Under him there are two Deputy Superintendents who are in charge of Multiple Officers' Ranges at Jamnagar and Mithapur. Under each Deputy Superintendent are 5 to 6 Inspectors. Jamnagar Multiple Officer's Range comprises Jamnagar city and taluka and Dhrol, Jodiya, Lalpur and Kalavad talukas. Mithapur Range comprises Okhamandal, Khambhalia, Kalyanpur. Bhanvad and Jamjodhpur talukas.

The Central Excise Department deals with excise taxes levied on 29 items. Those important in Jamnagar district are : tobacco, package tea, internal combustion engines, patent and proprietary medicines, paints and varnishes, vegetable non-essential oils (processed), coal tar dyes, china and porcelain wares, motor vehicle trailors, copper and copper alloys, cement, woollen fabrics, cotton, woollen and rayon yarns, soda ash, petroleum

products, etc., which yielded a total annual revenue of Rs. 93,400,000 in the year 1964-65.

Income-tax—This is one of the direct taxes levied and collected by the Central Government. There is one Inspecting Assistant Commissioner of Income-tax stationed at Jamnagar who is in charge of this tax in the district. Under him there were 5 Income-tax Officers functioning at Jamnagar during the year 1963-64.

The details regarding realisation of Income-tax in Jamnagar district for the years 1955-56 to 1963-64 are given below.

Year	Under Rs. 5,000		Over Rs. 5,000		Total	
	No. of assessees	Amount of tax (Rs. in thousand)	No. of assessees	Amount of tax (Rs. in thousand)	No. of assessees	Amount of tax (Rs. in thousand)
1	2	3	4	5	6	7
1955-56 ..	1,802	105	1,204	2,306	3,006	2,471
1956-57 ..	1,704	58	1,322	2,594	3,026	2,652
1957-58 ..	2,198	96	1,880	5,400	4,078	5,496
1958-59 ..	2,215	93	1,953	5,531	4,168	5,624
1959-60 ..	2,281	95	2,451	5,955	4,732	6,050
1960-61 ..	2,689	88	2,850	5,790	5,539	5,878
1961-62 ..	4,409	103	2,086	5,828	6,495	5,931
1962-63 ..	4,710	108	2,212	7,330	6,922	7,438
1963-64 ..	5,584	112	2,542	7,352	8,126	7,464

Source :
The Inspecting Assistant Commissioner of Income-Tax, Jamnagar Range, Jamnagar

There is progressive increase in the number of assessees and the amount of Income-tax realised. The reduction in the number of assessees under Rs. 5,000 for the year 1956-57 seems to be due to the removal of infructuous cases. The increase in the number of assessees from the year 1957-58 onwards accompanied by a corresponding increase in the collection of tax is due to the lowering of the maximum slab of income not taxable. The increase is also due to an increase in Income-tax rates as well as to the developmental activities under the Second and Third Five Year Plans.

STATEMENT X.1

Original and Revision Surveys

Sl. No.	Taluka	Original Survey		Revison Survey	
		Villages	Year of survey	Villages	Year of survey
1	2	3	4	5	6
1	Jamnagar	6	1897	1	1925
		38	1898	74	1928
		27	1899	1	1929
		2	1900	1	1944
		2	1903	1	1947
		1	1904	4	1958
		3	1914	4	1960
		2	1915	..	..
		2	1917	..	..
		3	1918	..	..
		1	1919	..	..
		1	1921	.	..
		1	1935	..	..
		4	1953	..	..
		11	1954	..	..
2	Dhrol	1	1880	..	..
		17	1950	..	..
		12	1951	..	..
		10	1952	..	..
		2	1953	..	..
3	Kalavad	8	1899	52	1930
		21	1901	1	1932
		20	1902	3	1959
		1	1904	..	..
		1	1906	..	..
		1	1951	..	..
		15	1952	..	..
		32	1953/54	..	..
		2	1955	..	..
		2	1956	..	..
		1	1957	..	..
4	Jodiya	7	1900	4	1929
		22	1901	33	1930
		2	1902	1	1959
		1	1903	3	1960
		1	1908	1	1961
		5	1911	1	1962
		5	1912	..	..
		1	1914	..	..
		2	1916	..	..
		1	1921	..	..
		2	1952	..	..
		3	1954	..	..
		1	1955	..	.
		1	1956	..	..

Source :

District Inspector of Land Records, Jamnagar district, Jamnagar.

STATEMENT X.1—*contd.*

Sl. No.	Taluka	Original Survey		Revision Survey	
		Villages	Year of survey	Villages	Year of survey
1	2	3	4	5	6
5	Khambhalia	1	1898	39	1958
		69	1904	31	1959
		6	1905	..	..
		1	1915	..	..
		1	1951	..	..
		10	1955	..	..
6	Jamjodhpur	3	1870	23	1930
		2	1899	1	1944
		5	1901	2	1960
		4	1902	..	..
		2	1903	..	..
		33	1905	..	..
		1	1917	..	..
		4	1952	..	..
		21	1953	..	..
		3	1954	..	..
		1	1956	..	..
		1	1959	..	..
7	Kalyanpur	6	1899	67	1958/59
		20	1900	..	..
		8	1902	..	..
		25	1903	..	..
		2	1904	..	..
		4	1932	..	..
		11	1955	..	..
8	Okha	1	1894	42	1928
		6	1895	..	..
		37	1896	..	..
9	Lalpur	1	1890	31	1930
		9	1898	27	1931
		3	1899	1	1959
		1	1900	..	..
		2	1901	..	..
		2	1905	..	..
		1	1913	..	..
		3	1914	..	..
		1	1940	..	..
		4	1951	..	..
		4	1952	..	..
		5	1953	..	..
10	Bhanvad	36	1905	45	1938
		26	1906	1	1943
		1	1919	1	1944
		2	1921	1	1957
		4	1954	4	1959
		2	1955	..	..

CHAPTER XI

LAW, ORDER AND JUSTICE

Police

EARLY HISTORY[1]

When the British assumed charge of the province of Kathiawar in 1820, there was safety neither of life nor property. The absence of any judicial machinery left the Chiefs, both large and small, to deal with their subjects as they chose. Village guard was the only agency which guarded the countryside and protected the travellers from thieves and guided them through the village limits. Crimes of most heinous nature were passed over with no severe punishment other than an insignificant fine. It was usual to afford protection to the fugitives and criminals, a principle of high honour which was seldom or never violated. This certainty of finding protection was a powerful inducement to some of the *Girasias* or land holding classes deprived of their land or revenue rights over the villages they held, to resort to *baharvata* or outlawry. The *baharvatias* were most inhuman. They murdered inoffensive subjects in cold blood, set villages on fire without even a thought to pity, harried cattle and maimed all they could not carry. The conditions in this region were thus unsettled and life and property insecure towards the middle of the nineteenth century. The advent of the British in the peninsula helped the princes establish the rule of law and bring order out of chaos by bringing the offenders to book.

Even at the time of Independence in 1947 and the subsequent formation of a unified State of Saurashtra, the peninsula was not fully cleared of the menance of *baharvatias*. The progressive policy of Land Reforms pursued by the Government of Saurashtra put an end to the feudal oligarchy which made the erstwhile landlords discontented. Various gangs of outlaws which appeared in consequence and were harboured by the vested interests, the Government put down with a firm hand.

FUNCTIONS OF POLICE

The primary functions of the police are the prevention and detection of crime, maintenance of law and order, apprehension of offenders, escorting and guarding of prisoners, protecting Government treasuries and private or public property and prosecution of criminals. They have,

1 CAMPBELL, JAMES, *Gazetteer of the Bombay Presidency*, Vol VIII, *Kathiawar*, pp. 324-38, 1884

however, certain other duties to perform such as inspection of shops selling explosives and poisonous drugs, extinguishing fires, giving aid to displaced persons and pilgrims, verification of character, passports and naturalisation inquiries. The following functions devolve on the Police under the Bombay Police Act, 1951, as adapted and applied to Gujarat State, (a) prompt serving of summons and execution of warrants, (b) obtain information concerning the commission of cognizable offences, (c) prevent commission of public nuisances, (d) apprehend culprits, (e) offer assistance to disabled or helpless persons, take charge of intoxicated persons and of lunatics at large who appear dangerous or incapable of taking care of themselves, (f) prevent loss or damage by fire and avert any accident and danger to the public, (g) regulate and control the traffic and maintain order at public places like temples, fairs, public bathing and washing places, etc., and (h) discharge other duties imposed upon them by any law for time being in force.

Incidence of Crime—On account of territorial changes in the boundaries of the district, the data on crimes appertain to the years 1960, 1961 and 1965 that is to say, to the period subsequent to the formation of the State of Gujarat. A study of Statement XI.1 reveals a fall in the total number of crimes committed in the district between 1960-1965. It also shows that offences reported under special and local laws, which numbered 14,337 or 92·46 per cent in 1961 declined to 8,733 or 84·67 per cent in 1965. Among other offences, those relating to person and property were of common occurrence. Hurt claimed the highest number which has shown a progressive increase from 452 in 1960 to 651 in 1965 followed by theft which rose from 154 to 265 during the same period. Whereas offences reported under public tranquillity registered a steep fall from 308 in 1960 to 6 in 1965, those (i) against the State, (ii) coins and stamps, (iii) religion, and (iv) public servant were not reported at all.

STATEMENT XI.1

Incidence of Crime

Sl. No.	Description of offence	No. of offences reported in the year		
		1960	1961	1965
1	2	3	4	5
1	Against the State	..	..	..
2	Relating to the Army and Navy ..	..	..	1
3	Public tranquillity	308	25	6
4	Relating to public servant . ..	..	..	..

Source :

1. Bureau of Economics and Statistics, *District Statistical Abstract*, Jamnagar, pp. 52-54, 1961-62
2. District and Sessions Judge, Jamnagar

STATEMENT XI.1—*contd.*

Sl. No.	Description of offence	No. of offences reported in the year		
		1960	1961	1965
1	2	3	4	5
5	Contempt of the lawful authority of public servant	23	27	15
6	False evidence (Chapter XI) ..	4	2	4
7	Relating to coins (Chapter XII) ..	..	..	..
8	Relating to Government stamps ..	..	..	..
9	Relating to weights and measures ..	..	10	..
10	Affecting the public health, safety, convenience, decency and morals (Chapter XIV) ..	63	1	82
11	Relating to religion (Chapter XV) ..	..	..	..
12	Affecting life	78	105	96
13	Causing of miscarriage, etc.	3	..	..
14	Hurt	452	486	651
15	Wrongful restraint and confinement ..	27	22	36
16	Criminal force	77	79	73
17	Kidnapping, etc.	11	7	16
18	Rape	2	4	2
19	Unnatural offence	1	1	..
20	Theft	154	220	205
21	Extortion	2	2	2
22	Robbery	4	8	23
23	Criminal misappropriation	6	5	7
24	Breach of trust	60	19	32
25	Stolen property	2	4	3
26	Cheating	43	48	55
27	Fraudulent deeds, etc.	..	..	8
28	Mischief	61	79	35
29	Criminal trespass	100	67	110
30	Offence relating to documents trade or property marks (Chapter 18)	5	6	..
31	Breach of contract	4	..	..
32	Offences relating to marriage (Chapter 20) ..	9	12	13
33	Defamation	16	18	10
34	Criminal intimidation, insult and annoyance (Chapter 22)	56	32	59
35	Under special and other local laws ..	9,914	14,337	8,733
	Total	11,485	15,926	10,336

POLICE ADMINISTRATION

Nawanagar State—Each individual State organised its own police force. Towards the close of the last century, the village police in Nawanagar State consisted of a Mukhi, or Police Patel, aided by the village *pasaitas*, besides professional trackers in all large or important villages. The State was divided for police purposes into six divisions—each under a Police Inspector, who had about 15 horse and 175 foot under his orders. All of these worked under the Superintendent of Police, Nawanagar. He had under his orders 24 horse and 177 foot. A small drilled force of 300 Infantry was maintained also at the Capital, solely for military duties.[1]

Prior to integration, the Police organisation in Nawanagar State was headed by the Commissioner of Police. The police force was divided into two categories-stipendiary and the village police. The former was controlled by the Commissioner of Police and consisted of 8 Police Inspectors, 22 Foujdars (grade I and II), 40 Jamadars, 76 Havaldars, 90 Naiks and Lance Naiks and 666 constables of I, II and III grades. The mounted police comprised one *Risaldar*, one *Dafedar* and 47 camel and horse *swars*.

The Inspectors and *Foujdars* were respectively in charge of Mahals and Subdivisions. The Village Police, on the other hand, was directly subordinate to the Police Patel of each village, who, in turn, was responsible for their good behaviour to the local police authority and through him to the Commissioner of Police. The State Forces consisted of the Huzur Body Guard, Shatrushalya Infantry, Ranjitsinhji Girasia Cadet Corps and Shirbandhi. They were headed by a retired Indian Army Colonel who was designated Officer Commanding, Nawanagar State Forces and also worked as Home Member and Military Secretary to the Jam Saheb.

Saurashtra State—As seen earlier, on the formation of the Saurashtra State, the district police force was organised on Bombay lines under the Superintendent of Police with a hierarchy of officials functioning under him. This set-up continued on its merger into Bombay State and the formation of the State of Gujarat.

Gujarat State—For the purpose of administration, Gujarat State has been divided into two Police Ranges, each under a Deputy Inspector General of Police and Jamnagar district has been placed in the Police Range, Rajkot. The District Magistrate has control over the District Superintendent of Police and the police force of the district. He decides the questions of policy and matters relating to the administration of law within the district, but does not interfere with such matters as recruitment, internal economy, and organisation of the District force. The District

1. WATSON, J. W., *Statistical Account of Nawanagar*, p. 42, 1879

Superintendent of Police is the executive head of the police force in the district. His primary duties are to keep the force under his control properly trained, efficient and contented and to ensure by constant supervision that the prevention, investigation and detection of crime in the district are properly and efficiently dealt with by the police force.

At the district headquarters, the District Superintendent of Police is assisted by an Inspector who is termed Home Inspector and works as his personal Assistant. He supervises the work of the office at the headquarters during the former's absence In bigger districts there are Inspectors for Local Crime Branches. In Jamnagar district, there is an officer of the rank of Sub-Inspector of Police each for the Local Crime Branch and the Local Intelligence Branch. Each district is divided into a number of Police Stations, each in charge of a Sub-Inspector of Police, who has under him Head Constables and Constables.

POLICE DIVISIONS—Jamnagar district is divided into Jamnagar and Khambhalia Police Subdivisions with their headquarters at Jamnagar and Khambhalia respectively, each in charge of a Deputy Superintendent of Police. He is responsible for all crime works within his subdivision and carries out the general orders of the Superintendent. He is also responsible for the efficiency and discipline of the officers and men in his subdivision. He has to hold detailed inspections of Police Stations and out-posts in his charge at regular intervals. Each subdivision has one or more Inspectors who are employed for crime work and supervision of bad characters and gangs in their circle. They also supervise and co-ordinate the crime work of different Police Stations within their circles.

In addition to the Police headquarters at Jamnagar, there are in all 16 Police Stations and 16 Out-posts in the district. Of the former, 2 are City Police Stations, viz., Jamnagar city 'A' and 'B' divisions and the remaining are Taluka Police Stations, as shown below in Statement XI.2.

STATEMENT XI.2

Police Stations and Out-posts

Sl. No.	Taluka	Police station	Out-post
1	2	3	4
1	Jamnagar ..	.. Jamnagar City 'A' division	..
2	,, ..	.. Jamnagar City 'B' division	..
3	,, ..	.. Panchkoshi 'A' division	Jam-Vanthali
4	,, ..	.. Panchkoshi 'B' division	(i) Sikka (ii) Bedi
5	Dhrol ..	.. Dhrol	..

STATEMENT XI.2—*concld.*

Sl. No.	Taluka	Police station	Out-post
1	2	3	4
6	Jodiya ..	.. Jodiya	(i) Amran (ii) Balambha
7	Kalavad ..	.. Kalavad	(i) Nikava (ii) Kharedi
8	Khambhalia	.. Khambhalia	Vadatra
9	„	.. Salaya	..
10	Lalpur ..	.. Lalpur	..
11	Kalyanpur ..	.. Kalyanpur	(i) Bhatia (ii) Raval
12	Jamjodhpur	.. Jamjodhpur	Tarsai
13	„	.. Dhrafa	Sheth-Vadala
14	Bhanvad ..	.. Bhanvad	..
15	Okhamandal	.. Dwarka	(i) Varvala (ii) Dhinki
16	„	.. Okha	(i) Mithapur (ii) Beyt

The sanctioned strength of Police officers and men in the year 1965 was 1,060, distributed as under : District Superintendent of Police-1 ; Deputy Superintendents of Police-2 ; Police Inspectors-3 ; Police Sub-Inspector-30 ; Unarmed Head Constables-110; Unarmed Constables-398; Armed Head Constables-91; Armed Constables-425. The district police force also had in addition Armed Reserve Police consisting of 6 Armed Head Constables and 30 Armed Constables. The expenditure on the officers and establishment in the district for the year 1965 was Rs. 1,615,330. The ratio of the police to area and population worked out to one policeman to 3·7 sq. miles and one policeman to 805 persons in the same year.

Railway Police—The control and administration of the Railway Police is vested in a Superintendent of Police who has a parallel organisation on the lines of the District Superintendent of Police. He functions under the supervision and control of the State Deputy Inspector General of Police and the Inspector General of Police.

Anti-corruption and Prohibition—With a view to eradicate the evil of corruption and for a more effective implementation of the prohibition policy of Government, the Anti-corruption and Prohibition Intelligence Force has been created under the direct control of the Inspector General of Police, Gujarat State. Every district has at least one Sub-Inspector of Police from this force.

The entire police force numbering 1,024 was literate in 1965.

The district has a fleet of 12 Police Vehicles. Wireless arrangement has been provided as under : (i) Jamnagar-1 transmitter and 1 receiver (working on main), 1 transmitter and 1 receiver (working on battery stand), and (ii) Okha-1 transmitter and 1 receiver. In 1960, a high frequency wireless transmitter was set up in Jamnagar city with 1 wireless transmitter for control and 2 transmitter receivers working on 6 volt battery for mobile vans.

Housing -854 policemen (permanent and temporary) and 23 Sub-Inspectors, were housed in Government quarters.

Welfare of Police—Various facilities and amenities provided at the Police headquarters, Jamnagar, for the welfare of the police include (1) mess and canteen services where articles of daily use are sold; (2) fair price shop and a vegetables shop; (3) maternity and child welfare centre; (4) recreation room where newspapers, books and periodicals are made available ; (5) sewing class run from the Police Welfare Fund. One trained lady instructor is engaged on a salary of Rs. 45 per month to impart training in knitting, sewing and embroidery to the womenfolk of the police force ; (6) nine Ambar *charkhas* have been purchased which help supplement their income. The services of an instructor from the Khadi Gràmodyog Bhandar, Ahmedabad, have been requisitioned to impart training in Ambar *charkha* ; (7) primary school for children housed in one of the residential quarters set apart for the purpose; (8) one 16 mm. cinema projector has been recently purchased for showing cinema shows: and (9) weekly conveyance facility to the members of families of the police force who are allowed the use of the vehicle every Saturday for the purpose of marketing.

KOTWAL SCHEME—The *kotwal* scheme has been adopted since 1st May, 1962. Kotwal is a servant appointed at the village by the Mamlatdar for performing duties prescribed from time to time by Government or by any officer authorised by Government in this behalf. The number of kotwals to be appointed in each village is determined by the Collector in accordance with the scale and rules prescribed. Kotwals are paid a fixed amount of Rs. 27 per month, recently raised to Rs. 37 p. m. After the introduction of the Panchayati Raj, they work under the Panchayat. The appointment of a kotwal is for the period up to the 1st April following the date of appointment. Though it is purely temporary, it is renewed from year to year so long as the holder of the appointment continues to be fit to hold it. His service does not qualify for leave, gratuity or pension. In February every year, the *Talati-cum-Mantri* of the village has to submit a report to the Mamlatdar in the form prescribed in duplicate. He sends the original direct to the Mamlatdar and forwards the duplicate to him through the Sub-Inspector of Police. A kotwal is required to give security for Rs. 100 and furnish two sureties in Form F as he has to handle Government money. The Revenue Patel or the Revenue and Police Patel, if there be no Revenue Patel, is primarily

responsible for the general supervision and control over the work of the kotwal of his village. The number of kotwals working in Jamnagar district is 235.

VILLAGE POLICE—Under the Bombay Village Police Act (VIII of 1867), the control over the village police is vested in the District Magistrate who may delegate any of his powers to the District Superintendent of Police. Each village generally has a Police Patel, who is required to collect information regarding suspicious characters and send them to the police station. He has to keep a strict watch over the movements of notorious characters under surveillance of the police and give all the information he possesses about what is happening in the village when the patrolling policemen visit the village.

Prior to the introduction of Panchayati Raj, in every villages there were two posts—One of Revenue Patel and another of Police Patel appointed by the Sub-Divisional Magistrate in accordance with the provisions of the Hereditary Offices Act. In smaller villages, the Police Patel carried out both the revenue and police functions, while in larger ones there were separate posts of Revenue Patel and Police Patel. However, after the introduction of Panchayati Raj from 1st April, 1963, the work of collection of revenue has been transferred to the Panchayat. The Police Patels are now entrusted with the maintenance of law and order only and the collection of land revenue is done by the kotwals.

HOME GUARDS—Home Guards organisation in this district was started in 1948 by the former Saurashtra State. It functioned under the Commandant, Home Guards, who had under him District Organisers and local leaders appointed by Government. The local leaders were paid honorarium. The organisation is non-political and non-communal. All members on the roll sign a pledge to the effect that they will well and truly serve the people without fear and affection, malice or ill will for the maintenance of peace and prevention of crime against person and property. There are 10 centres operating in this district. Jamnagar, Mithapur, Sikka, Khambhalia, Okha, Bhanvad and Salaya are first class centres, while Jamjodhpur, Jodiya and Dwarka are second class centres. In the year 1953, the posts of District Organisers were abolished and the charge of the centres was handed over to the local leaders of I and II class centres.

Home Guards are imparted training in squad drill, *lathi* drill, arms drill, firing, use of bayonet and physical exercises. They are also trained in semaphore Morse signalling (signalling with flags or hands). When called on duty, they enjoy the same powers and protection as those of the members of the police force. Their functions consist mainly of guarding public buildings, patrolling, prevention of crime and assisting the police in their duties. They are paid duty allowance at the rate of Rs. 2·50 per day, whenever they are on duty.

Gram Rakshak Dal—Another organisation established by the Government for the protection of rural areas is the Gram Rakshak Dal. It is a body of men primarily organised for the defence of village against dacoits, other anti-social elements, protection of person and safety and security of public property in a village. During the time of emergency these Gram Rakshak Dals are an adjunct to and work in close co-operation with the police in maintaining internal security. Every person between the ages of 20 to 50 residing in a village, possessing good health and character, antecedents and civic sense and educated up to third standard vernacular, is eligible for appointment as a member of the Gram Rakshak Dal. The District Superintendent of Police is designated as the appointing authority and every member of the Gram Rakshak Dal is invested with the powers, privileges and protection of a police officer when called for duty. The members of the Gram Rakshak Dal are given training in elementary squad drill, *lathi* drill, physical exercises, arms drill, organising *naka bandis* in the village, combating of dacoits and robbers and first aid to the injured by the Police Head Constables appointed specially for this purpose. They are also encouraged to do night patrolling in their respective villages, both on their own as well as with the police. They are also mobilised when the village faces dangers like floods, fire or attacked by dacoits, robbers, etc. In Jamnagar district the villages where Gram Rakshak Dals were organised numbered 527 and had a membership of 8,714 till October, 1966. Of these 307 were Naiks and 206 up-Naiks. Members of the Dal are recommended for arms licences in deserving cases.

Mahila Gram Rakshak Dal—Similar organisation for women was started in the wake of Pakistani aggression in 1965. The objective of organising this separate wing is to inculcate a spirit of defence among women and to induce them to take part in protecting life and property in the village. During such emergencies as flood, fire, earthquakes, etc., they are required to give first aid to the injured and prepare food for the affected. Help in saving ladies from the clutches of anti-social elements is one of the main features of the Mahila Gram Rakshak Dal. Any woman, between the ages of 18 and 50 possessing good health, character and educated up to IVth Standard, is eligible for recruitment. The District Superintendent of Police is the appointing authority in which work he is assisted by the Honorary Women Organisers of the district. Members are trained in elementary drill, use of rifle and cane, elementary knowledge of law, first aid to the injured, collection of intelligence about anti-social elements and freeing harassed people from the clutches of such persons. In this district the Mahila Gram Rakshak Dal had 316 members besides 8 Naiks and an equal number of up-Naiks in October, 1966.

Sagar Rakshak Dal—The Gram and Sagar Rakshak Dals give the countryside a sense of direct participation in the defence efforts of the nation. With a view to protect the long coastline in the State, the Government

has also started an organisation called the Sagar Rakshak Dal in the coastal areas of the State, following the Pakistani aggression. Members are given training in interception of enemy boats and to keep a thorough vigil in the coastal areas about the possibilities of infiltrators or saboteurs entering the villages through sea. The Sagar Rakshak Dal was organised in this district in 10 villages and had a membership of 237 besides 17 Naiks and 17 up-Naiks.

Jails

ORGANISATION--Prisons in Gujarat State are constituted under the Prisons Act of 1894. The Inspector General of Prisons, Ahmedabad, is the head of the Jail Department appointed under Section 5 of the Prisons Act IX of 1894 and exercises, subject to the orders of the State Government, general control and superintendence over all prisons, jails and the head-quarter sub-jails in the State. The Jail Department functions under the Home Department.

There is a district prison at Jamnagar, where prisoners sentenced to more than 3 months and up to 2 years' imprisonment are kept. Undertrial prisoners are also kept in this prison. There is a part-time Superintendent who is a Senior Medical Officer of the local Government hospital, assisted by a Senior Jailor, Junior Jailor, ministerial staff and jail guards for the management of the prison. The duties of reserved guards are performed by the Armed Police for which a guard consisting of one Head Constable and six *sepoys* is sent daily by the Police Department.

There are 7 judicial lock-ups at Khambhalia, Kalyanpur, Dhrol, Jodiya, Kalavad, Lalpur and Bhanvad and one sub-jail at Dwarka in the district. The Judicial Magistrate of the place in which the judicial lock-up is situated is the Superintendent of the judicial lock-up and a clerk from the Judicial Court works as the Jailor.

The District Jail at Jamnagar is one of the best constructed Jails in Gujarat State and has a capacity to accommodate 240 prisoners. The total number of convicts and undertrials in the jail as on 5th October, 1966 was as under.

Convicts		Undertrials		Detenues		Total	
Males	Females	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7	8
75	..	18	..	2	..	95	..

Source :

The Superintendent, District Jail, Jamnagar

The absence of females among convicts, undertrials and detenues is significant.

Prison Discipline—Prison life is well organised. Prisoners behave in a disciplined manner, and any breach of prison discipline is dealt with under the Prisons Act, 1894. Prisoners, found guilty, are awarded various types of punishments, viz., (i) cut in remission, (ii) separate confinement, (iii) stoppage of canteen facilities, etc.

The statement given below shows the nature and number of jail offence reported during the year 1965.

	Nature of offence	Number
1	Offences relating to work	4
2	Offence relating to assault	1
3	Offences relating to other breaches of jail discipline ..	14
	Total	19

After Independence, the jail administration has been greatly reformed. As a result of the implementation of the recommendations of the Jail Reforms Committee of 1948, the entire outlook towards prisoners has changed. Previously stress was laid on breaking down the personality of the prisoners by giving them inhuman task of grinding, inflicting such punishment as whipping, chaining in iron chains, etc., and employing them on non-productive work. This has been stopped and prisoners are now provided with productive work and trained in various crafts like textiles, carpentry, manufacture of chalk sticks and Ambar *charkha* mainly with a view to enable them to earn their livelihood when released.

The Jamnagar District Jail is equipped with tools relating to manufacture of textiles, chalk sticks, etc. Chalk sticks manufactured here are supplied to all Government departments of Gujarat State. The total value of factory articles manufactured in the District Jail during the year 1965 amounted to Rs. 7,256·25 bringing a profit of Rs. 4,536·19.

Welfare of Prisoners—Though jails are considered penal institutions, the policy of Government towards prisoners is not retribution or revenge but reformation and rehabilitation of those men and women who find themselves in jails for a variety of reasons. Whatever may be the cause of the prisoner's entry into Jails, it is the duty of Jail Administration to equip him with such training as will enable him to settle down as honest, decent and useful citizen of the community after his release. With this end in view various reforms have been introduced in Jails. These are (i) remission of sentence for good behaviour, (ii) granting of furlough and parole, (iii) adult literacy classes started since 1960 teaches 30 prisoners on an average, (iv) providing newspapers, (v) training in various crafts, (vi) spinning during

leisure hours and remittance of money thus earned to their family members, (vii) canteen facilities-permission to spend up to Rs. 10 per month from the money earned by them in jail on items like tea, milk, cigarettes, match-boxes, soap, etc., (viii) cultural activities in the form of *bhajans*, songs, etc., and (ix) provision of games like volley-ball, *hu-tu-tu*, etc. Games competitions are sometimes arranged by inviting teams from outside.

Treatment of Prisoners, Juvenile Delinquents—The Jail at Jamnagar is classified as a district Jail where prisoners sentenced up to two years' imprisonment are detained. Prisoners are classified into undertrial prisoners, civil prisoners, prisoners having simple imprisonment and those undergoing rigorous imprisonment. Those convicted are given reformatory treatment in Jail during the period of their confinements. Those detained under the Preventive Detention Act, 1950 (as amended in 1961), and the Defence of India Act, 1962 are called detenues and are governed by the Rules made under these Acts. They are classified as class I and II detenues and in comparison with other convicts, provided with additional facilities like table, chair, cot, extra interviews and letters and permission to contest elections.

Ordinarily convicts are allowed to write letter once a month whereas undertrial prisoners can do so once a week at Government cost. Interviews with outside persons including relatives are allowed once a month to convicted persons while such interviews can be arranged once a week in case of undertrial prisoners. Additional interviews are also granted in special cases. The District Jail at Junagadh has been classified as Jail for juveniles and so juvenile prisoners admitted in Jamnagar District Jail are transferred to Junagadh.

Panchayat system is introduced in the Jail to implement the programme and activities undertaken for the welfare of prisoners. Panchayat members are elected. The Panchayat functions in a democratic way under the supervision of the Jail Administration. The Panchayat has been helpful in maintaining good discipline in the jail as also in building up the moral character of the prisoners.

JUVENILES AND BEGGARS—Activities for the welfare of juveniles and beggars are conducted under three special Acts, viz., (1) The Saurashtra Children Act, 1956; (2) The Women's and Children's Institutions Licensing Act, 1956; and (3) The Bombay Probation of Offenders Act, 1938.

The Directorate of Child Rehabilitation and Social Welfare was the controlling authority under the Education and Rehabilitation Department in the former State of Saurashtra. But from November, 1956, the work was taken over by the Directorate of Social Welfare, Bombay State. On the formation of Gujarat State, this work is entrusted to the Directorate of Social Welfare functioning at Ahmedabad.

Observation Home—An observation home was started at Jamnagar in 1958 under the provisions of the Saurashtra Children Act, 1956. To assist in the implementation of this Act, a private agency called Jamnagar District Probation and After-care Association was formed and a Probation Officer appointed in 1958. As the District Probation and After-care Association showed its inability to raise its share of the necessary finance to run the institution, its management was taken over by the Government in 1961.

The Observation Home provides training in craft and literacy for inmates who are detained till their cases are finalised by the Court. The children committed to the institutions are usually sent to the Special School at Rajkot and other Certified Schools in Gujarat State, but retained in the Home pending vacancy in those Schools. The institution has its own newly constructed building and is capable of accommodating 30 inmates. The Home is staffed by 1 Probation Officer-*cum*-Superintendent, 1 language teacher, 1 clerk-*cum*-housemaster, 1 craft teacher, 1 cook, and 2 attendants.

Shri Kasturba Stree Vikas Griha at Jamnagar is recognised as an Observation Home for Girls. It is a Fit Person institution for receiving committed girls on long term basis. Towards the expenditure incurred, the institution receives grant-in-aid at the rate of Rs. 35 per month for remanded cases and Rs. 30 per month for cases committed by the Court.

Two centres known as (1) Juvenile Guidance Centre, and (2) Family Counselling Centre have been started by Shri Kasturba Stree Vikas Griha. The former provides recreational activities to children with the ultimate aim of channelising their activities to constructive ends. The centre also organises group activties so that children learn to live in groups. It receives a hundred per cent grant from the Government. The Family Counselling Centre advises families in respect of avenues of employment, childrens' education, training, etc., provides medical aid, and directs families to suitable agencies giving such help.

Women's and Children's Licensing Act, 1956—This Act regulates and provides for licensing of institutions for the care of women and children. The official agency for the enforcement of the Act was formerly the District Magistrate. But after the Government of Bombay had applied the Womens' and Childrens' Institutions (Licensing Act), 1956 to the whole of Bombay State with effect from April, 1959, the Saurashtra Act was repealed and the Director of Social Welfare became the licensing authority for the State. Shri Kasturba Stree Vikas Griha, Jamnagar was licensed under this Act.

Bombay Probation of Offenders Act, 1938—Though this Act was in force in the former State of Saurashtra there was no machinery in the district till 1964 to look after the implementation of the Act. Two posts, one of

Chief Officer, and the other of District Probation Officer were created from the year 1964 to implement the provisions of the Act.

Judiciary

EARLY HISTORY[1]

Before British Supremacy in the Kathiawar province, to quote Sir George Jacob, the people of Kathiawar had no idea of civil or criminal laws, nor did they seem sensible of the want. Each case used to manage its own affairs through Panchayats or councils. The people were left pretty much to themselves in the adjustment of disputes and mulcting was almost the sole penalty, capital punishment was rarely inflicted, save in two or three largest States. One of the peculiar features in the criminal jurisprudence of the country was a custom which prevailed in many of the States keeping spies to report cases of breaches of chastity. What the state of judicial administration of the province was at the beginning of the 19th century may be gathered from the reports of Colonel Walker. "The administration of Justice amongst the Marathas" he wrote, "was entirely neglected......... The Government seldom inflicted capital punishments and this was the source of one of its greatest abuse. Almost every crime was commutable for money............and fines were considered a regular branch of revenue. The only object the Maratha Government had in view in Kathiawar was collection of tribute." In short in 1820, when the British Government assumed supremacy over the States of Kathiawar, there was security neither of life nor property. In 1831, it established a court of criminal justice in Kathiawar, presided over by the Political Agent, aided by three or four Chiefs, for the trial of capital crimes in the estates of Chiefs who were too weak to punish such offences and of crimes committed by petty chiefs upon one another or otherwise than in the legitimate exercise of authority. With this exception the Political Agent exercised no magisterial powers. A curious feature in the constitution of the court of criminal justice was that the chiefs, who sat with the Political Agent, were judges, not simply assessors, and that they were entitled to vote, not only as regards the conviction, but also as regards sentence and the punishment. In 1863 the administration was reorganised by arranging the jurisdictional chiefs into seven classes and their powers and the extent of their jurisdiction were defined. The province was divided into four districts or *Prants* and over each of them a European Political Officer was set to superintend the administration and to try inter-jurisdictional cases and offenders who had no known chiefs, or who were under such petty landholders as might be unable to bring them to trial.

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1. CAMPBELL, JAMES, *Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar*, pp. 325-33, 1884

NAWANAGAR STATE--The State of Nawanagar was a Class I State in the Kathiawar peninsula and as such exercised first class jurisdiction with powers to try capital offences without permission from the Political Agent. British subjects were excepted from the exercise of this jurisdiction. Prior to 1863 courts of justice hardly existed in the Princely States. There was no regular procedure and no constituted courts. Any crime could be commuted for fine, and sentences of imprisonment depended entirely on the caprice of the Chief. By degrees regular courts were instituted. Courts of first instance were subject to courts of appeal; codes based on the model of the British Penal and Criminal Procedure Codes were drawn up in the larger and more advanced States. Pleaders were allowed to practice in courts and were even permitted to criticise the acts of a Chief or of the local authority. It was in the year 1864 (V. S. 1920) that Jam Vibhaji II constituted civil and criminal courts in the Nawanagar State, enacted and adapted local and British laws and paved the way for giving justice to the people of his State.[1] *The Statistical Account of Nawanagar*[2] compiled in the year 1879, sums up the position of Judiciary in Nawanagar State in the following terms.

> "There are in all twenty-three Criminal Courts in the State, viz., seven Courts of Mahal Nyayadhishes, who exercise the powers of a Second Class Magistrate, one Court of original jurisdiction in the town of Nawanagar itself, presided over by an official with the powers of a Magistrate of the 1st class. There are also in the Mahals fifteen Courts under officers exercising the powers of a Third Class Migistrate. There are nine Courts of original jurisdiction in civil matters in this State, viz. eight in the Mahals and one in Nawanagar itself. The Courts of the Mahals of Bhanvad, Lalpur, Kandorna and Ambran, have authority to decide cases of value not exceeding Rs. 5,000. The Courts of Atkot, Nawanagar, Khumbhalia, and Jodiya hear suits up to Rupees 10,000. Causes exceeding these amounts in value have to be preferred in the Court of the Sar-Nyayadhish at Nawanagar."

Further on, it states, "In criminal matters an appeal lies from the decisions of the officers above mentioned to the court of the Sar-Nyayadhish at Nawanagar, and in like manner he hears appeals in civil matters from the decisions of the District Officers. Appeals lie from the decisions of the Sar-Nyayadhish in both civil and criminal matters to the Chief Justice of the State, from whom lies an appeal to the Jam Sahib himself."

"There is a separate Court to decide cases regarding land or right in dispute with the *Bhayad* or *Mulgirasias*. Appeal lies from decisions passed here, to the Rajasthanik Court."

1 BATHU, M. B., *Shri Yaduvansh Prakash ane Jamnagar-no-Itihas*, p. 322, 1934

2. WATSON, J W., *Statistical Account of Nawanagar*, pp. 41-42, 1879

The judicial set-up in Nawanagar State, at the time of integration of States in the Union of Saurashtra, consisted of : (1) the Huzur Court, (2) the Sir Nyayadhish, (3) The City Magistrate's Court, (4) Nyayadhish Courts, (5) Small Causes Court and (6) Munsiff Magistrate Courts.

The Huzur Court exercise all the powers of a High Court, except that in case of a capital sentence awarded by the Sir Nyayadhish exercising the powers of the Sessions Judge, the appeal against decision was heard by His Highness.

The Sir Nyayadhish who exercised the powers of the Sessions Judge, was also a District Magistrate; he further exercised appellate powers in criminal cases. On the civil side he heard appeals against decisions of the Munsiffs and the Nyayadhishes besides applications for the grant of heirship and Succession certificates, as well as applications in guardianship, probate, letters of administration and insolvency cases. The Sir Nyayadhish also enjoyed powers of the Judge of the Small Causes Court in civil matters up to the limit of Rs. 250. First appeals against his decisions in these cases as well as in the Sessions cases with the solitary exception of a case in which capital sentence subject to confirmation was awarded by him lay to the Huzur Court exercising the powers of a High Court.

The Huzur Court heard second appeals against the decisions of the court of Sir Nyayadhish as the court of first appeal on the civil and criminal side and also exercised general revisional jurisdiction.

The Nyayadhish and the Joint Nyayadhish heard suits above the value of Rs. 2,500 and also suits up to the value of Rs. 2,500 from the Panchkoshi Mahal, excluding suits heard by the Sir Nyayadhish as Small Causes Judge.

The City Magistrate exercised all powers of a First Class Magistrate with summary jurisdiction in the City and the Panchkoshi Mahal.

Each Mahal had a Munsiff Magistrate with first class powers in criminal matters and powers to hear civil suits up to the value of Rs. 2,500. The Khambhalia Munsiff exercised the powers of Small Causes Courts up to Rs. 50 only in the towns of Khambhalia and Salaya.

DHROL STATE—The State of Dhrol had established the Huzur Court, the Sir Nyayadhish Court and the Nyayadhish Court. The Huzur Court was the highest court for civil and criminal justice. The Judge of the Sir Nyayadhish Court exercised powers of the Sessions Court as also of the District Magistrate. To him also lay the first revision application in criminal cases. The Judge of the Nyayadhish Court was invested with full civil and criminal jurisdictions and was empowered to hear suits up to Rs. 100 as small causes suits.

DHRAFA AND JALIA DEWANI—Jalia Dewani was a separate tribute paying taluka of the Halar Prant. Being a talukdar of the fifth class, he exercised civil jurisdiction to the extent of Rs 5,000 and in criminal cases he had powers to award sentence up to two years' rigorous imprisonment and fine up to Rs. 2,000.

Dhrafa was a Thana under the control of an Assistant Political Agent. The Thandar exercised civil powers up to Rs. 1,000 and criminal powers enjoyed in British India by a Magistrate of the Second Class.

SAURASHTRA STATE—After the formation of the State of Saurashtra in 1948, Judicial Courts in Halar district (present Jamnagar District) were established under the Saurashtra District and Subordinate Civil Courts Ordinance, No. XI of 1948. They were : (1) District Court. (2) Civil Judges Court. (Senior and Junior Divisions), and (3) Munsiffs' Courts.

The District Court was the principal court of original civil jurisdiction in the district and was a Court of Appeal from all the decrees and orders passed by the Subordinate Courts in suits or proceedings where the value of the subject matter did not exceed Rs. 5,000. The District Judge exercised general control over all the Civil Courts and their establishments.

Subordinate to the District Judge, there were in all three cadres of Judicial Officers, viz., (i) Civil Judge, Senior Division, (ii) Civil Judge. Junior Division, and (iii) Munsiff

The Government of Saurashtra had also constituted a separate board of Civil Judge, Junior Division, Jamnagar under Section 5 of the Saurashtra Agricultural Debtors' Relief Act, 1954. He was empowered to hear applications in cases where the total debts did not exceed Rs. 10,000. The Civil Judge, Senior Division, Jamnagar was authorised to try cases where the total debts exceeded Rs. 10,000.

REORGANISED BOMBAY STATE—This position remained uncharged till 1st April, 1959, when the Bombay Civil Courts Act, 1869, was made applicable to the bilingual Bombay State and the Saurashtra District and Subordinate Civil Courts Ordinance, 1948 was repealed. Consequent upon the application of the said Act, the following changes have been effected in the working of Civil Courts :

(1) The District Court is empowered to hear appeals from all decrees and orders up to the value of Rs. 10,000 passed by the Subordinate Courts.

(2) The jurisdiction of a Civil Judge. Junior Division, extends to all original suits and proceedings of a civil nature, wherein the subject matter does not exceed Rs. 10,000 in value.

Other changes effected by the Government of Bombay were :

(i) With the coming into the force of the Bombay Separation of Judicial and Executive Functions (Extension) Act and the Code of Criminal Procedure (Provisions for Uniformity) Act, 1958 with effect from 1st September, 1959, the Saurashtra Separation of Judicial and Executive Functions Act, 1952 was repealed with a view to bring about uniformity in the working of the Criminal Courts in the State of Bombay. The Bench of Honorary Magistrates at Jamnagar was also abolished from 1st September, 1959.

(ii) With the reorganisation of Jamnagar district under the Government of Bombay Notification dated the 19th June, 1959, Okhamandal taluka, which formerly formed part of the revenue district of Amreli, was merged within the territorial limits of Jamnagar District whereby the Court of Civil Judge, Junior Division, Dwarka (Okhamandal) was placed under the District Court, Jamnagar.

(iii) The Board of Civil Judge, Junior Division, Jamnagar, constituted for Jamnagar district under the Saurashtra Agricultural Debtors' Relief Act, 1954, was abolished with effect from 28th February, 1959, and powers to hear such applications vested in the respective Civil Judges, Junior and Senior Divisions, from that date.

PRESENT SET-UP

(i) Civil Courts

District Judge –The set-up of the judiciary of Jamnagar District after the formation of the State of Gujarat is the same as that in existence in the bilingual Bombay State. The District Judge, Jamnagar, is the highest judicial authority in the district and presides over the District Court which has its headquarters at Jamnagar. The District Court is the principal court of original jurisdiction in the district. It is also a court of appeal from all decrees and orders passed in the suits valued up to Rs. 10,000 by the subordinate courts. The provisions of Civil Manual of 1960, Volumes I and II, issued by the High Court of Judicature, Bombay, Appellate side, for the guidance of the civil courts and officers subordinate to it were made applicable to this district with effect from 28th April, 1960. The District Judge exercises general control over all the civil courts and their establishment and inspects the proceedings of courts subordinate to him. He also exercises jurisdiction under the following special Acts, viz., Bombay Motor Vehicles Act, Land Acquisition Act, Public Trusts Act, Bombay District Municipalities Act, Bombay Municipal Boroughs Act, Bombay Rent Act, as adapted and applied in Gujarat State and Indian Electricity Act, Indian Telegraphs Act, Indian Railways Act, Election Petitions, etc.

Appointment to the post of Assistant Judge is made whenever necessary depending upon the volume of work in the District Court. The Assistant Judge exercises both original and appellate jurisdiction. He can try original cases, the value of which does not exceed Rs. 15,000. So far as appellate jurisdiction is concerned, he is empowered to try such appeals from the decrees and orders of the subordinate courts, which are filed in the District Court and which may be referred to him by the District Judge. At present no person is working as Assistant Judge in this district.

Subordinate to the District Judge, are courts of the Civil Judges, Senior Division and Civil Judges, Junior Division. The jurisdiction of the latter extends to all original suits and proceedings of a civil nature wherein the amount involved in the subject matter does not exceed Rs. 10,000 in value, while that of the former extends to all original suits and proceedings of a civil nature irrespective of the value of the subject matter.

At Jamnagar, besides the District Court, there is a court of Civil Judge, Senior Division, and four courts of Joint Civil Judges, Junior Division. As Small Cause Judges, Civil Judges of Senior Division and Junior Division, try cases up to the prescribed pecuniary limits as per powers vested in them by the High Court. In addition to these Courts, there are five courts of Civil Judges, Junior Division and Judicial Magistrates, First Class located at (i) Khambhalia-Kalyanpur (linked court), (ii) Dhrol-Jodiya (linked court), (iii) Bhanvad-Jamjodhpur (linked court), (iv) Kalavad and (v) Dwarka. The period for which the linked courts hold courts at linked stations is given below.

Linked Courts

1	Khambhalia-Kalyanpur ..	Thirteen days commencing from 2nd Monday of alternate months at Khambhalia and 6 days from 2nd Monday of alternate months at Kalyanpur.
2	Dhrol-Jodiya ..	Thirteen days from 2nd Monday of alternate months both at Dhrol and Jodiya respectively.
3	Bhanvad-Jamjodhpur .	Thirteen days from 2nd Monday of each month at Jamjodhpur.

The third Joint Civil Judge, Junior Division and Judicial Magistrate, First Class, Jamnagar, holds his court for three days commencing from first Thursday of each month at Lalpur. Whenever there is any vacancy in any of these courts arrangements for the disposal of work are made by keeping

charge with the presiding officer of a court of the neighbouring taluka as may be convenient, who visits such courts according to the exigencies of work.

The Saurashtra Children Act (XXIX of 1956), 1956 was made applicable to the Saurashtra area repealing the Saurashtra Children Act (XXI of 1954). The Children's Court was established at Jamnagar with effect from October, 1956 under the provisions of Section 15 of the said Act read with rule 15 of the Saurashtra Children Rules, 1956. At present the Joint Civil Judge, Junior Division and Judicial Magistrate, First Class at Jamnagar presides over the Children's Court constituted under the Saurashtra Children Act, 1956.

The Government of Saurashtra had also constituted a court of Honorary Magistrates at Jamnagar consisting of Chairman, Vice-Chairman and a member invested with powers of First Class Magistrate. They do not exercise any civil or criminal powers now. There are 13 Honorary Magistrates in the district.

(ii) Criminal Courts

The District Judge, Jamnagar, is also the Sessions Judge of the district. The Sessions Judge tries criminal cases committed to his Court by the Judicial Magistrates after preliminary inquiry and hears appeals against the decision of the subordinate magistrates. He is also the Special Judge of the district and tries all cases under the Prevention of Corruption Act, 1947.

The Assistant Judge exercises the powers of Additional Sessions Judge on the criminal side for the trial of sessions cases, criminal appeals and miscellaneous criminal applications transferred to him for disposal by the Sessions Judge. If the Assistant Judge is not invested with powers of a Sessions Judge, he works as an Assistant Sessions Judge only. The Sessions Judge and the Additional Sessions Judge may pass any sentence authorised by law, but any sentence of death passed by them is subject to confirmation by the High Court. They can also hear appeals and revision applications from the decisions of Magistrates. The Assistant Sessions Judge can impose a sentence of imprisonment for 10 years. He has no power to hear appeals and criminal revision applications. At present the post of Assistant Judge is vacant. The appointment of Assistant Sessions Judge or Additional Sessions Judge is made whenever necessary according to the volume of work in the Sessions Court.

The Bombay Separation of Judicial and Executive Functions Act and the Code of Criminal Procedure Act of 1958 classify the Magistrates into two categories, viz., (1) Judicial Magistrates, and (2) Executive Magistrates.

All the Judicial Magistrates in the district are the Magistrates of First Class. They are subordinate to the Sessions Judge who may, from time to time make rules or give special orders as to the distribution of business among them.

Executive Magistrates fall under the following classes—(1) District Magistrates, (2) Sub-Divisional Magistrates and (3) Taluka Magistrates. All executive Magistrates are subordinate to the District Magistrate and the Taluka Magistrates to the Sub-Divisional Magistrates concerned subject to the general control of the District Magistrate. Their powers and functions are detailed in paras III-A, IV and V of Schedule III of Criminal Procedure Code. Appeals from orders of Executives Magistrates requiring security for keeping peace lie to the Sessions Court. Criminal Manual of 1960, issued by the High Court of Bombay, was made applicable to the Saurashtra area with effect from 25th April, 1960.

Law Officers—The Law Officers of Government functioning in Jamnagar district are: (1) District Government Pleader and Public Prosecutor, (2) Assistant Government Pleader and Assistant Public Prosecutor, and (3) Honorary Assistant to District Government Pleader and Public Prosecutor. There were about 118 legal practitioners in 1966 in this district.

CIVIL CASES—The following statement shows the number of civil cases classified according to (A) the nature of suits and (B) the amount involved during the year 1965.

STATEMENT XI.3

A—Civil Cases classified according to nature of suits, 1965

Sl. No. 1	Particulars 2	No. of cases 3
1	No. of cases pending at the end of the year 1964	858
2	New cases instituted during the year 1965	
	Cases relating to—	
	(a) Money and movable property	1,345
	(b) Immovable property	430
	(c) Specific Relief	168
	(d) Mortgage	42
	(e) Others	44
	Total	*2,029*
3	Cases revived and received otherwise	16
4	Suits disposed of during the year	1,790
5	Cases pending at the end of 1965	1,113

STATEMENT XI.3—*concld.*

B—Civil Cases classified according to amount involved, 1965

Sl. No.	Particulars	No. of cases
1	Not exceeding Rs. 10	3
2	Over Rs. 10 but not exceeding to Rs. 50	123
3	Over Rs. 50 but not exceeding Rs. 100	168
4	Over Rs. 100 but not exceeding Rs. 500	576
5	Over Rs. 500 but not exceeding Rs. 1,000	206
6	Over Rs. 1,000 but not exceeding Rs. 5,000	235
7	Over Rs. 5,000 but not exceeding Rs. 10 000	29
8	Over Rs. 10,000	19
9	Cases of which the monetary value could not be estimated	650
	Total	*2,020*

Out of a total of 2,029 cases registered in the year 1965, those relating to money and property numbered 1,345 or 66·28 per cent. Of these, cases not exceeding Rs. 5,000 in value numbered 1,331, those above Rs. 5,000 but not exceeding Rs. 10,000 numbered 48, whereas 650 were cases, the monetary value of which could not be estimated. Out of 1,790 suits disposed of, 463 were disposed of without trial, 195 were *ex-parte*, 13 were decided by admission of claim, 590 by compromise and 517 after full trial. No suit was disposed of by reference to arbitration. 12 suits were transferred. There were 248 appeals (including miscellaneous appeals and appeals under Saurashtra Agricultural Debtors' Relief Act, 1954) pending at the end of the year 1964. During the year 1965, 246 more appeals were instituted bringing the total to 494, of which 369 appeals were disposed of leaving 125 pending at the end of the year 1965. Out of the 369 appeals disposed of during this year, 40 were either dismissed or not prosecuted. Decrees of the lower court were confirmed in 221, modified in 25 and reversed in 83.

CRIMINAL CASES

In the year 1965, 10,299 offences were reported in the Criminal Courts of Jamnagar district. The number of persons undertrial was 20,403. Cases of 17,108 persons were disposed of; 5,216 persons were discharged or acquitted; 11,757 persons were convicted; 127 persons were committed to sessions; and 8 persons died or escaped. Of those convicted, 303 were sentenced to imprisonment, 10,506 were fined, 42 released on admonition and 906 asked to give security.

In the Sessions Court, 45 offences were reported during the year 1965. Persons under trial were 164, of whom 129 were acquitted or discharged. 22 persons were convicted and 1 person who was awarded death sentence was referred to the High Court, and cases of 12 persons remained pending for trial at the end of the year. Out of 22 persons convicted, all were sentenced to imprisonment including one for life.

Revenue and Expenditure—The total revenue derived in 1965-66 from such items as general fees, fines and forfeiture, cash receipts of record room,

miscellaneous receipts and sale proceeds of unclaimed and escheated property amounted to Rs. 91,681, whereas the total expenditure on salaries, allowances and contigencies amounted Rs. 365,671.

Nyaya Panchayats—Over and above the judicial courts constituted as above, Panchayat Courts were also established in villages covered by Gram Panchayats to try minor cases of civil nature and petty criminal offences with a view to avoid undue hardship and expenditure to the village people. The provision for constituting Nyaya Panchayats was made in the Saurashtra Village Panchayats Ordinance, 1949, whereunder powers to try certain civil suits and criminal complaints under the Indian Penal Code were conferred. Cases under the House Trespass and Cattle Trespass Act also came within its purview. An appeal against the decision of the Panchayat lay before the District Judge within 30 days of the judgment of the Panchayat. Panchayats could not inflict any punishment by way of imprisonment but could only impose a fine up to Rs. 40.

The Nyaya Panchayats in the composite State of Bombay, which also included areas of Saurashtra and Kutch, were formed under the Gram Panchayats Act of 1958 and brought into operation in all the areas of the State from May 2, 1959. This Act permitted the establishment of a Nyaya Panchayat for a group of 5 or more than 5 villages. After the enactment of Gujarat Panchayats Act, 1961, Nyaya Panchayats are also established in places where there are Nagar Panchayats and for a group of five or more than five villages in case of Gram Panchayats. The Act further provides for a Conciliation Panch, whose fundamental duty is to settle disputes between parties. Nyaya Panchayats take cognizance of and try suits in respect of money due on contracts, recovery of movable property and suits whose value does not exceed Rs. 250. The Nyaya Panchayats also try certain complaints under the Indian Penal Code, Prevention of Cruetly to Animals Act, Bombay District Vaccination Act, 1892, Bombay Primary Education Act, 1947 and Saurashtra Primary Education Act, 1956 (Sections 29, 30, 93, 94 95, 323 and 324). The Nyaya Panchayats are empowered to inflict maximum penalty in respect of offences triable by it. In 1965-66 there were in all 115 Nyaya Panchayats in Jamnagar district constituted in accordance with Section 212 of the Gujarat Panchayats Act, 1961, covering 5 to 7 Panchayats under each Nyaya Panchayat.

BAR ASSOCIATION

The Jamnagar Bar Association founded in 1935 is the only Bar Association in the district. It is not registered. Total membership of the association is 92. The association is formed to promote co-operation among the members of the Bar.

CHAPTER XII

OTHER DEPARTMENTS

The role of public administration has been increasingly expanding in recent times to meet the exigencies of planning for a welfare State. The activities now undertaken by Government are so diverse that a number of departments which did not exist or play any significant part in the past have come up since Independence to give effect to and keep pace with the growing tempo of work generated by the various nation-building activities implemented in each successive Five Year Plans. Agriculture, Animal Husbandry, Forest, Public Works, Industries, Co-operation, etc., are the important departments the activities of which have expanded enormously since Independence. This Chapter deals with the administrative set-up of these departments.

AGRICULTURE DEPARTMENT

There were days when agriculture did not merit the distinction of having a separate department. And even when such a necessity was felt during pre-Independence days, its activities were not so widespread and intensive as they are today. In the country and the State where over 68 per cent of the economically active population is employed on land and livestock, agriculture has assumed supreme importance to ensure self-sufficiency in food. This has led to the reorganisation of the department in two sections, agriculture and animal husbandry, each under a separate Director with its ramifications reaching down to the village.

Administrative Set-up—The District Agricultural Officer is in charge of the agricultural activities in Jamnagar district. He is responsible technically to the Superintending Agricultural Officer, Rajkot and administratively to the District Development Officer, Jamnagar.

An Agricultural Officer assists the District Agricultural Officer in looking after the Taluka Seed Multiplication Farms. Three Agricultural Supervisors also help him in looking after different activities. One is in charge of office administration and general technical work, another is in charge of irrigation work, and the third attends to plant protection activities in the district.

There are ten Agricultural Supervisors, known also, as Extension Officers (Agriculture), one each for every Taluka Development Block under the administrative control of respective Taluka Development Officers. These

officers attempt to accelerate the adoption of improved methods of agriculture in accordance with the technical guidance given by the District Agricultural Officer. An Agricultural Supervisor has been appointed for the Aliabada Seed Farm and nine Agricultural Assistants each look after the remaining Taluka Seed Multiplication Farms. For the Pilot Scheme of intensive cultivation of wheat, Agricultural Assistants, one each in Jodiya, Dhrol and Kalavad talukas have been appointed for extension work. A groundnut package scheme in Jamjodhpur taluka has been started for which a separate unit of establishment has been sanctioned.

The District Agricultural Officer is responsible for the following activities: (1) implementation of developmental schemes under the Five Year Plans, (2) holding field demonstrations of agriculture extension, (3) organisation of crop protection services and dry farming methods, (4) supervision of agricultural activities in blocks, crop cutting experiments, seed multiplication farms and conducting trials of improved seeds and fertilizers, (5) organisation of farmers' unions, crop competitions and *Van Mahotsava*, (6) distribution of improved seeds and implements and conducting their demonstrations, (7) submission of various periodical returns and carrying out rural development activities, (8) distribution of plant protection appliances, insecticides, fungicides, etc., (9) preparation of town and rural compost, and (10) technical guidance to co-operative farming societies.

After the implementation of Gujarat Panchayats Act from 1st April, 1963 production committees have been formed at district and taluka levels. The District Agricultural Officer is the Secretary at the district level and Extension Officer (Agriculture) at the taluka level.

Agricultural Demonstration and Propaganda—Agricultural demonstration centres help the cultivators to adopt agricultural improvements advocated by the department. Field demonstration of standing crops and improved farming practices are held during the season. Agricultural shows and exhibitions are held every year. Taluka Development personnel conducts propaganda work in respect of agricultural activities. The *Gram Sevak* plays an important role in propagating improved methods of agriculture.

Agricultural Experiments and Research—There are three agricultural research stations in the district, viz., (1) Agricultural Research Station, Jamnagar, (2) Irrigation Demonstration Farm near Lakhabaval, and (3) Dry Farm at Khambhalia.

The Research Station at Jamnagar is engaged in agronomical research on *bajri*, castor and other crops. The Millet Specialist of Gujarat State stationed at this centre carries out research work in millet. Agronomic and hybridisation experiments on various crops are also carried out at this station.

The Irrigation Demonstration Farm* near Lakhabaval studies the water requirements and guides cultivators in improved technique of agricultural production through proper use of irrigation water. The Officer-in-charge of this farm works as Farm Manager under the control of the Millet Specialist, Gujarat State, Jamnagar. The Dry Farm at Khambhalia was opened under the scheme of starting experimental farms for non-canal areas of the region with a view to carry out research on dry farming methods of cultivation. The farm is under the charge of a Senior Research Assistant who is assisted in his work by Agricultural Assistants.

Soil Conservation—The scope of activities undertaken by the Department of Agriculture has been much widened in recent times to include such constructive activities as the programme of soil conservation aiming at preservation of the fertility of land and conservation of moisture. Out of different soil conservation activities such as contour bunding and survey and classification of cultivable waste land, only the contour bunding scheme has been undertaken by the department in the district. For an effective programme of soil conservation, one subdivision has been started from 1956-57 with headquarters at Jamnagar. The Subdivisional Soil Conservation Officer is in charge of the programme. He is under the Deputy Director of Agriculture (Soil Conservation), Rajkot, who is responsible to the Superintending Agricultural Officer, Rajkot, working under the Joint Director of Agriculture, (Eng.), Ahmedabad. Under this subdivisional soil conservation unit, there are five Agricultural Supervisors working in different talukas with headquarters at Dhrol, Kalavad, Khambhalia, Bhatia (Kalyanpur) and Bhanvad. Under each Agricultural Supervisor are stationed five Agricultural Assistants working with headquarters in different villages.

The Deputy Director of Agriculture (Soil Conservation) is responsible for the administration and execution of the programme of work in subdivisions under his charge. He acts as the Secretary of the District Land Improvement Board and arranges to bring all bunding schemes under the purview of the Bombay Land Improvement Scheme Act, 1942. He accords technical sanction to the plans and estimates for new bunding work costing more than Rs. 10,000 and up to 20,000. He also accords sanction to the recovery statements and transmits them to the revenue authorities for effecting recoveries.

The jurisdiction of a Subdivisional Soil Conservation Officer extends over the entire district. He gives technical guidance to his staff, scrutinises the plans and estimates prepared by the Agricultural Supervisors and the Agricultural Assistants under him and accords sanction to final plans and estimates costing up to Rs. 10,000. He exercises a percentage check over the work executed, maintains accounts and prepares recovery statements for the

works he is authorised to sanction and transmits them to revenue authorities for recovery.

Agricultural Supervisors and Agricultural Assistants carry on propaganda for the extensive adoption of the contour bunding scheme by the cultivators, try to convince them of the advantages it brings and obtain their consent for its execution in the prescribed form. They also frame the survey proposals; carry out survey and levelling work; prepare rough plans and estimates; execute works as per plans and estimates sanctioned; make payments to labourers; and keep detailed accounts of the work done.

Animal Husbandry and Veterinary Department

Animal Husbandry Department is concerned with veterinary and live-stock activities. It looks after cattle wealth by improving their breed, giving necessary veterinary aid and taking prophylactic measures against contagious and infectious diseases. For all these activities, there is one office at the district level headed by the District Animal Husbandry Officer. Cattle improvement schemes and allied activities have their own staff working under the guidance of the District Animal Husbandry Officer, (except sheep which is directly under the State administratively and technically). Under him are dispensaries and poultry farms in charge of Veterinary Officers and Stockmen at taluka level.

Veterinary Dispensaries and First Aid Veterinary Centres

Sl. No.	Veterinary Disponsaries	Sl. No.	First Aid Veterinary Centres
1	2	3	4
1	Jamnagar	1	Pachhtar
2	Lalpur	2	Kharedi
3	Dhrol	3	Bhangol
4	Dwarka	4	Amran Matva
5	Khambhalia	5	Vanathli
6	Kalavad	6	Moti Bhalsan
7	Jamjodhpur	7	Salaya
8	Bhanvad	8	Movan
9	Jodiya	9	Raval
10	Kalyanpur	10	Khadkhambhalia
		11	Gamana
		12	Padana
		13	Sonvadia
		14	Jalia Dewani
		15	Tersai

Form the above statement it is observed that all the talukas of the district have been provided with veterinary facilities. While veterinary dispensaries are located at taluka headquarters, the first aid veterinary centres are established at the villages listed above.

The following is the total number of animals treated in the district during the last three years

Sl. No.	Item	No. of out-breaks reported			No. of innoculations and vaccinations		
		1963-64	1964-65	1965-66	1963-64	1964-65	1965-66
1	2	3	4	5	6	7	8
1	Total No. of cases treated (non-contagious)	N. A.	N. A.	N. A.	63,997	66,735	79,787
2	CONTAGIOUS DISEASES						
	(i) Rinderpest	2	N. A.	2	N. A.	N. A.	106,852
	(ii) South African Horse Sickness	7	8	6	320	104	900
	(iii) Ranikhet and Foulpox ..	N. A.	N. A.	6	5,060	394	1,400
	(iv) Enterotoxaemia ..	N. A.	1	26	920	15,113	42,362

N. A.=Not available

Source :
The Director of Animal Husbandry, Gujarat State, Ahmedabad

There is a slaughter house at Jamnagar. The Veterinary Officer examines the small animals (sheep and goats) and gives health certificate before slaughter.

FOREST DEPARTMENT

The Chief Conservator of Forests with headquarters at Baroda is the head of Forest Department of Gujarat State. Under him there are three territorial circles, (1) Baroda Circle, Baroda, (2) Junagadh Circle, Junagadh, and (3) Surat Circle, Surat and two other circles for special work, each under a Conservator of Forests. Special Circles relate to (1) Kotar Afforestation and Reclamation, and (2) Research and Working Plan. Both are located at Baroda. Conservators have under them Divisional Forest Officers to look after the administration of divisions under their charge. They belong to Gujarat Forest Service Class I. They are assisted by Subdivisional Forest Officers who belong to Gujarat Forest Service Class II, Rajkot Division is one of the divisions functioning directly under the control of the Conservator of Forests, Junagadh. This division has its jurisdiction over three districts of Saurashtra region, viz., Jamnagar, Rajkot and Surendranagar.

A division is subdivided into smaller executive charges called ranges supervised by Range Forest Officers who are non-gazetted subordinate officers

(Class III) usually trained at one of the Forest Colleges in India at Debra Dun or at Coimbatore. Each range is further subdivided into rounds, each under a Round Officer or a Forester, trained at forest classes held in the State at *Chhota* Udaipur in Baroda district. Finally each round is subdivided into beats and each beat is managed by a Beat Guard also called a Forest Guard. A training class for Guards has been opened at Junagadh which trains Guards from all the circles.

The total forest area in Jamnagar district in 1965-66 was 647·49 sq. km under the Divisional Forest Officer, Rajkot Division. To keep the forest preserved, protected and improved, there are 3 Range Forest Officers one each stationed at Jamnagar for Jamnagar range, Dwarka for Okha range and Jamjodhpur for Jamjodhpur range. Under the Range Forest Officer, Jamnagar, there are 4 Round Officers, who are in charge of Bedi, Jodiya, Salaya and Balambha rounds. Under the Range Forest Officer, Dwarka, there are 3 Round Forest Officers, each in charge of Gorinja, Kuranga, and Beyt rounds. Under Range Forest Officer, Jamjodhpur there are 4 Round Forest Officers stationed at Sidsar, Satapar, Samana and Lalpur. Besides these officials there is one Grass Officer at Jamnagar, one Grass Inspector stationed at Jamjodhpur, and 7 Grass Clerks in charge of 7 different talukas.

PUBLIC WORKS DEPARTMENT

The Public Works Department deals with (1) roads and buildings, (2) irrigation, (3) public health, (4) electricity, and (5) ports. The sphere of activities of each of these 5 branches is quite distinct from each other. Each of the first three have been placed under the charge of a Superintending Engineer. The electrical circle is under the charge of the Electrical Engineer to the Government, while the work relating to ports is looked after by the Director of Ports. At the State level are Chief Engineers also working as Joint Secretaries under the Secretary to Government in the Public Works Department.

(1) *Roads and Buildings*—Activities in regard to roads and buildings relate to their construction, maintenance and repairs and also include constructions of bridges.

The Jamnagar Division (Roads and Buildings) comprising the revenue district of Jamnagar is under the control of the Superintending Engineer, Rajkot Circle, Rajkot. This division is in charge of the Executive Engineer having three subdivisions under him, viz., (1) City Subdivision, Jamnagar, (2) Jamnagar Subdivision, Jamnagar, and (3) Roads and Buildings Subdivision, Khambhalia, each in charge of a Deputy Engineer. Executive Engineers belong to Gujarat Service of Engineers Class I and Deputy Engineers to Gujarat Service of Engineers Class II. Subdivisions are further divided

into sections, each in charge either of a Junior Engineer, Supervisor or Overseer. There are seven Junior Engineers, two Supervisors and four Overseers in this division. As on 31st March, 1966, this division maintained 40·04 km. of cement concrete roads, 258·40 km. of asphalted roads and 29·27 km. of metalled (water bound mecadam) roads.

Roads and Buildings Division (Panchayat)—On the inauguration of Panchayati Raj from 1st April, 1963, Major District Roads, Other District Roads and Village Roads are transferred to the Jamnagar District Panchayat. Roads and Buildings Division (Panchayats) is in charge of an Executive Engineer and is divided into six subdivisions, viz., (1) Road Project Sub-division, Jamnagar, (2) Lalpur-Jamjodhpur Subdivision, Jamnagar, (3) Khambhalia Subdivision, Khambhalia, (4) Dhrol, Subdivision, Dhrol, (5) Dwarka Subdivision, Dwarka, and (6) Irrigation Investigation Subdivision, Jamnagar. Each of the subdivisions is under a Deputy Engineer. There are 6 Deputy Engineers and 40 Overseers in this division including Extention Officers (P. W. D.) of Taluka Development Offices. On 31st March, 1966, this division maintained 618·12 km. of metalled roads and 446·37 km. of un-metalled roads.

(2) *Irrigation Circle*—The activities in regard to irrigation relate to construction, reclamation and repairs of irrigation works and flood control measures. Of 10 irrigation schemes completed in Jamnagar district, 4 are medium and 6 are minor schemes. Of 3 schemes under construction, two namely, Sapda and Vartu are medium and one is minor.

Irrigation works in the district are divided into two parts, one at the State level dealing with major schemes and other at the Panchayat level dealing with minor schemes. The responsibility of maintaining and carrying out the former schemes lies with three Deputy Engineers, two stationed at Jamnagar and one at Bhanvad. The Panchayat schemes are looked after by a Deputy Engineer working under the Executive Engineer, Panchayat Division, Jamnagar.

(3) *Electrical Circle*—For carrying out advisory, administrative and executive duties pertaining to the generation and use of electricity there is a separate electrical circle for the whole State under the Electrical Engineer to Government. Under him there are 3 divisions, each in charge of an Executive Engineer with headquarters at Rajkot, Ahmedabad and Baroda. Jamnagar district is under the jurisdiction of the Rajkot Electrical Division. The Executive Engineer arranges for electrical installation in Government buildings and also performs duties of the Electrical Inspector under Indian Electricity Act (IX of 1910) and carries out inspection of medium pressure and high tension electrical installations, power houses, mills, cinemas, etc. The demand of power in the district is presently being met from the inter

connected power system receiving power from Dhuvaran Power Station and the Sikka Power Station.

(4) *Public Health Circle*—The Public Health Circle with headquarters at Ahmedabad is a specialised wing of the Public Works Dapartment which looks after the provision of drinking water facilities in the State. Its main functions and activities are planning, scrutiny and execution of public health engineering projects such as water supply, drainage and modern sanitary conveniences sponsored by Government and local bodies. The circle is responsible for the maintenance of Government water works and drainage and also those of local bodies, if so desired. It has under it a boring section which, in addition to doing the work of cleaning and developing bores whose source of water is reduced by sand blasting, does boring work for investigation of sources of water supply. This section also undertakes boring works of Roads and Buildings Circle for exploration of foundation strata of bridges, dams and culverts.

The Public Health Division with headquarters at Jamnagar has jurisdiction over the revenue districts of Jamnagar and Kutch and functions under the control of an Executive Engineer. This division is further subdivided into four subdivisions, with headquarters at Jamnagar and Dwarka in Jamnagar district, and Adipur and Anjar in Kutch district. Jamnagar Subdivision is in charge of Jamnagar Water Supply Scheme which is nearing completion and Amran group of villages Water Supply Scheme which is already completed. Dwarka Subdivision deals with (i) Raval, Gorana and Lamba Water Supply Scheme, (ii) Bhatia Water Supply Scheme which are completed, (iii) Dwarka Water Supply Scheme which is in progress, and (iv) Khambhalia and Salaya Water Supply Schemes which are passing through the stages of planning and preparation.

(5) *Ports*—For the purpose of administration, all the ports of Gujarat State are divided into eight groups, each headed by a Port Officer or Assistant Port Officer with his headquarters at the most important port of the group. Local Port Advisory Committee with representatives of customs, railway, municipal authorities, chambers of commerce, shipping, oil-mills association, salt manufacturers association, etc., advise the port authority on matters connected with port operation, local complaints, development of ports, etc.

In Jamnagar district there are two groups of ports, viz., (i) Bedi group of ports, and (ii) Okha group of ports. The Port Officer, Bedi port, is in charge of Bedi group of ports which includes the following intermediate and non-intermediate ports. Bedi (including Rozi), Navlakhi and Sikka are intermediate ports, and Jodiya, Salaya and Pindara are non-intermediate ports. There is a Port Officer-in-charge of Okha group of ports which includes Okha an intermediate port and Beyt and Rupen, non-intermediate ports.

They have been declared open to foreign and coastal traffic under Sections 11 and 12 of the Sea-Customs Act, 1878. The port of Pindara is open for coastal trade only. The Beyt port has no trade worth mentioning but has the importance of being a sacred place for Hindus.

Co-operative Department

Co-operative activities in Jamnagar district are in the administrative charge of the District Registrar, Co-operative Societies, Jamnagar, who is a gazetted officer in Class I cadre of the Gujarat Co-operative Service. Over him is the Divisional Deputy Registrar, Co-operative Societies, Rajkot, who has jurisdiction over seven districts, viz., Jamnagar, Bhavnagar, Rajkot, Surendranagar, Junagadh, Amreli and Kutch. The Department is headed by the Registrar of Co-operative Societies who is also the Director of Cottage and Small Industries working under the Department of Panchayat and Health at the State level. On the introduction of Panchayati Raj from 1st April, 1963, the State Government had grouped talukas and mahals of this district into two subdivisions, viz., Eastern and Western and an officer styled Assistant District Registrar, Co-operatives Societies, was placed in charge of each of the subdivisions with headquarters at Jamnagar. With effect from 1st September, 1964, certain powers of the Registrar have been delegated to the Jamnagar District Panchayat in respect of all types of primary societies falling within its jurisdiction under the Gujarat Co-operative Societies Act, 1961 (Gujarat Act X of 1962). One post of Assistant District Registrar has also been transferred to the district panchayat for looking after the working of societies under its jurisdiction, retaining the other post of the Assistant District Registrar in the office of the District Registrar, Co-operative Societies, at Jamnagar.

With the transfer of powers mentioned below to the district panchayat by the State Government further impetus has been given to the co-operative activities under the direct guidance of the democratic set-up at the district level. The powers exercised by the district panchayat are: registration of societies, maintenance of a register of societies, power of Registrar to decide questions relating to the formation, registration or continuance of societies and their membership; amendment of bye-laws, change of name, disposal of surplus assets of co-operative societies in the event of their winding up, etc. The District Registrar, Co-operative Societies, Jamnagar exercises the rest of the powers under the Act except those under Sections 14, 24, 71(2) 84(1), 153(1)(b), 153(2)(b), 155, 160 and 163 of the Gujarat Co-operative Societies Act, 1961 (Act No. X of 1962) in respect of all types of societies except those whose jurisdiction extends beyond the district. The District Registrar also performs functions pertaining to Industrial Co-operatives, Cottage Industries, Agricultural Marketing and Warehousing.

Supervisory and Extension Staff—There is an Extention Officer in each block to serve as the last link in the administrative machinery for co-operative work. Extension Officers are under the technical control of the District Registrar and under the administrative control of the district panchayat.

Prior to 1st April, 1964 Supervising Unions used to carry out supervision over the work of societies. The main functions of these unions were ; (1) to advise, guide, assist, rectify and control its constituent societies through efficient and regular supervision, (2) to provide the means of assessing the credit of each of its constituent societies, and (3) to make recommendations on their behalf to the financing agencies. The question of evolving a scheme of supervision to ensure efficient supervision over societies consistent with the responsibilities they would be shouldering was under the consideration of Government for some time. Pursuant to the decision taken in this behalf, the scheme of supervision has been transferred to the central financing agency of the district, i.e., Jamnagar District Central Co-operative Bank from 1st April, 1964. This bank now looks after the work of supervision in addition to its normal function of providing credit. The Supervising Unions which looked after this work have been liquidated and supervisors have been transferred to the Jamnagar District Central Co-operative Bank.

District Co-operative Board—Education and training in co-operation and propaganda for the development of co-operative movement in the district are being carried out by the District Co-operative Union, which is in turn affiliated to the Gujarat State Co-operative Union, Ahmedabad.

Audit—Section 84 of the Gujarat Co-operative Societies Act, 1961 provides for the statutory audit of every society once a year either by the District Registrar himself or through some person authorised by him. The audit staff in the district works under the control of the District Registrar. There are four categories of auditors, viz., (1) Special Auditors (Class II), (2) Auditors, (3) sub-Auditors (both Class III) and (4) Certified Auditors (Professional auditors). The Special Auditor audits the accounts of the District and Taluka Purchase and Sales Unions and large-sized primary agricultural co-operative societies. There are two Auditors in this district, having their headquarters at Jamnagar. These Auditors audit the accounts of Primary Agricultural Credit Societies having a turnover of more than 30,000 and less than Rs. 1 lakh, housing societies, industrial societies, non-agricultural credit societies, etc. Sub-Auditors audit the accounts of primary agricultural credit societies and other small societies. There are five posts of Sub-Auditors having their headquarters at Jamnagar, Kalavad, Dhrol, Khambhalia and Jamjodhpur.

The concurrent audit of the accounts of the Jamnagar District Central Co-operative Bank Ltd., is done by the Special Auditor, Gujarat State Co-operative Bank, whose headquarters are at Rajkot. The concurrent audit of the accounts of the weavers' co-operative societies is carried out by the Auditor, Weavers' Co-operative Societies, Ahmedabad. The concurrent audit of the Forest Labourers' Co-operative Societies, is carried out by the Auditors, Forest Labourers' Societies, Junagadh. There is one more post of Auditor at Jamnagar for the audit of consumer's co-operative stores, registered under the centrally sponsored scheme of consumer's co-operatives. Certified Auditors audit the accounts of those Housing Societies which do not have any financial assistance from the State Government.

Industrial Co-operatives and Cottage Industries—Before the formation of the Gujarat State, Industrial Co-operatives and Cottage Industries section was working as a separate section in the Co-operative Department. But with effect from 1st April, 1962, this separate section was done away with, and this activity at present forms part of the Co-operative Department. The District Registrar of Co-operative Societies looks after this work with the help of the Assistant District Registrar, attached to his office. Technical aspects of this activity are guided by the technical staff working at the State level in the office of the Registrar, Co-operative Societies, Gujarat State, Ahmedabad. Such staff includes; (1) Deputy Registrar (Industries), (2) Textile Expert, (3) Engineer for Cottage Industries, (4) Tanning and Leather Expert, (5) Senior Demonstrator for Dyeing and Printing, (6) Marketing Officer for Cottage Industries and others. Main functions on the industrial side are: (1) organisation of co-operative society of industrial artisans, (2) inspection, supervision and guidance to such societies, (3) scrutiny of loan and other applications for financial assistance to societies and individual artisans outside the co-operative field, (4) maintaining close contact with the working of societies and artisans for the progress and development of cottage industries, and (5) exploration of the possibilities for their growth. A federal type of society known as the District Industrial Co-operative Association at the district level, with headquarters at Jamnagar, and the primary industrial co-operative societies constituting its units, was registered on 5th February, 1959. It undertakes the following activities for the benefit of its members consisting of societies as well as individual artisans:

(1) Sale of handloom cloth, cotton yarn, and products of handicrafts manufactured by Industrial Co-operative Societies.

(2) Supervision and guidance to constituent societies and individual members.

(3) Survey to develop existing industries and to explore new potentialities.

(4) Supply of raw materials such as colours and chemicals to societies and artisans.

(5) Marketing facilities for the sale of finished goods of its constituents, by running an emporium at Jamnagar.

Money-lending—In view of the reorganisation of the Co-operative Department and integration of its functions, the District Registrar and the Assistant District Registrar of Co-operative Societies have to perform the duties of the Registrar and Assistant Registrar of Money-lenders respectively. The main work of the Assistant Registrar for Money-lenders is to conduct inquiries into applications for licences under the Act and to forward the same with his report to the Registrar of Money-lenders. The Registrar, on receipt of such applications along with the report of the Assistant Registrar, may grant or refuse to grant licences to the applicants on merit. The Registrar, exercises powers to compound cases of offences detected by the Assistant Registrar under Section 35 (c) of the Bombay Money-lenders Act, 1946, specifically cases of breaches of provisions of Sections 18 and 19. Their duties also include investigation of allegations against money-lenders and illicit money-lending business.

Co-operative Agricultural Marketing—At the taluka level, a primary marketing society known as Taluka Co-operative Purchase and Sale Union Ltd. has been organised in each of the ten talukas of the district. At the district level, the District Co-operative Purchase and Sale Union Ltd. functions as a federal body of such primaries. All these unions efficiently discharge their duties by undertaking the distribution of essential commodities, and agricultural requisities like chemical fertilisers, improved seeds, pesticides, agricultural implements, etc., and contribute towards the higher and better field of agricultural produce, commensurate with their financial resources. They run retail fair price shops and consumer's stores for the distribution of domestic needs of the people. The District Purchase and Sale Union at Jamnagar is also working as a wholesale store under the centrally sponsored scheme of consumer's co-operatives and is a federal body of primary consumer's co-operatives of Jamnagar city. But, for the activity of marketing of agricultural produce of farmers, who are members of village primaries, which in turn are members of the primary marketing societies, or district marketing society no noteworthy progress has been made. Efforts to achieve this objective continue and one primary marketing society at Kalavad which is known as The Adarsh Kalavad Taluka Co-operative Purchase and Sale Union Ltd. has been selected for making direct purchases from the producers. This institution has been provided with additional share contribution of Rs. 25,000 for this purpose. Eight out of ten taluka unions and the district union have also been provided with share capital on matching basis under the normal marketing scheme. Loans for

purchase of trucks have been advanced to the district union under the centrally sponsored scheme for consumer's stores and to the Jamnagar Taluka Union under the marketing scheme.

Department of Industries

The office of the Commissioner of Industries is the agency through which the industrial policy of the State Government is implemented. It looks after large scale as well as organised small scale industries. In conformity with the Government policy, the department assists industrialists in securing land, water, raw materials, power and other requirements. It gives them technical advice and also furnishes information in respect of raw materials, processes of manufacture and industrial potentialities. It also conducts investigation and research in technical problems relating to industries. Grant of financial assistance, purchase of stores for Government departments, enforcement of the Weights and Measures Act and administration of controls regarding distribution of raw materials for industries are some of its other activities. For this purpose, the office of the Commissioner of Industries has a net work of regional offices extending up to taluka levels. The Deputy Director of Industries, Rajkot, a Class I Officer of the Gujarat Industry Service is in charge of industrial development activities in the districts of Rajkot Region inclusive of Kutch district. He is assisted by an Industries Officer at the district level. The Industries Officer, Jamnagar is assisted by 3 Industries Inspectors, 2 posted at Jamnagar and 1 at Khambhalia.

Among the important activities carried out by the Deputy Director of Industries, Rajkot, the issue of the Essentiality Certificates for import of raw materials as well as capital goods is the foremost. He is empowered to issue Essentiality Certificates up to Rs. 2 lakhs in individual cases annually. The following are the particulars of applications received by the Industries Officer, Jamnagar, for Essentiality Certificates for controlled or scarce raw materials during 1966-67.

(i)	Iron and Steel	33
(ii)	Raw-Materials	489
(iii)	Non-Ferrous Metals	75

The issue of Quota Certificate to steel processing industries and foundaries for their requirements of steel is also attended to by him. He also functions as Assistant State Coal Controller for the distribution of coal and coke in the district.

The Deputy Director is in charge of the growth and development of organised small scale industries in his region. These units have to face many problems and finance is one of them. Financial aid is rendered to such units by advancing them loans under the State Aid Rules to Industries for constructing buildings, godowns and other works necessary for industrial operations and also for the purchase of raw materials. Loans up to Rs. 10,000 at 3 per cent interest are granted by the Commissioner of Industries and loans over Rs. 10,000 are granted by the Gujarat State Financial Corporation as the agent of the State Government. The Deputy Director of Industries, Rajkot, looks after cases pertaining to his region and sends his recommendations to the head office after necessary investigations and scrutiny. The Deputy Director recommends to the Commissioner of Industries applications seeking aid in implementing the hire-purchase schemes worked by the National Small Industries Corporation after necessary scrutiny. He also investigates applications of small scale units for registration with the National Small Industries Corporation, New Delhi, and with the Director General, Supplies and Disposals, New Delhi, and forwards them with necessary recommendations to the authorities concerned. The Deputy Director looks after industrial estates and attends to work pertaining to the grant of subsidy on consumption of electric power by small scale units of his region under the provisions of the Gujarat State Subsidy to Electric Power Consumption (Cottage and Small Scale) Rules, 1965. The quantum of subsidy admissible is the difference between the actual rate paid per unit consumed and (i) 3 paise per unit subject to a maxinum of 12 paise per unit, if the unit registered under these rules is situated in an area with population up to 20,000 or (ii) 6 paise per unit subject to a maximum of 9 paise per unit, if the unit registered under these rules is situated in a municipal area with population between 20,000 and one lakh or (iii) 9 paise per unit subject to a maximum of 6 paise per unit if the unit registered under these rules is situated in a municipal area with population about 1 lakh. No subsidy is payable on the consumption of electric power exceeding 2,000 kWh. in any month in respect of any small scale industries. There are 303 small scale industries registered with the Industries Officer, Jamnagar. During the Third Plan period a sum of Rs. 106,365 was disbursed as power subsidy to small scale industries, and further amount of Rs. 30,460·80 during the year 1966-67.

Other Acts under which the Deputy Director exercises certain powers are the Weights and Measures (Enforcement) Act, 1958 and the rules framed thereunder and the Industrial Undertakings (Collection of Statistics and Information) Rules, 1959. As regards weights and measures, Industries Inspectors collect fees for verification and re-verification of weights and measures, inspect instruments of weights and measurements, stamp them if found correct and sanction prosecutions for breaches of the Act. The Deputy Director looks after the collection of quarterly production statistics

under the Industrial Undertakings (Collection of Statistics and Information) Rules, 1959, the operation of which is limited to registered factories not employing more than 50 workers if using power and not more than 100 workers if worked without power.

With a view to quickening the tempo of development of industries in the district and to achieve more effective co-ordination in providing infra-structure facilities to industries, the Collector of the district has been designated as *ex-officio* Deputy Commissioner of Industries since October, 1967. The functions and powers assigned to him are:

(i) allotment of factory sheds and plots in the Government Industrial Estates.

(ii) holding of seminars connected with industries.

(iii) formulation of District Master Plans and publishing them.

(iv) co-ordination of activities of various heads of offices/departments with regard to infrastructure facilities.

(v) correspondence with all authorities in or outside the State directly with regard to the difficulties of industries in the district, and

(vi) supervision over the information centres functioning in the district.

OFFICE OF THE DISTRICT INFORMATION OFFICER

The District Information Officer of the Directorate of Information, Gujarat State, is stationed at Jamnagar. He acts as a link between Government offices and the press, keeps himself in touch with officers of various departments in the district and issues to the press news items which supply factual information on schemes and activities of the Government in the district. He also organises visits of pressmen to various development works, as and when considered necessary, and organises press conferences to provide an opportunity to the press to get first hand knowledge of the subject to be covered. He acts as a correspondent of the Directorate of Information, Gujarat State, and covers on its behalf working of Government schemes and activities, calls press conferences, etc.

As in every other district of the State, a mobile publicity van is placed at the disposal of the District Information Officer, Jamnagar. The van is equipped with a 16 mm. projector. It is taken round the district and film shows and talks which are both instructive and entertaining are arranged

on various nation-building activities such as agriculture, cattle improvement, health, prohibition, untouchability, small savings, education, defence, Five Year Plans, etc. He keeps the rural folk informed of the concessions and facilities offered to them by the State and Central Governments and also distributes leaflets, pamphlets, posters, etc., on items of public interest.

An Information Centre has been started at Jamnagar where books, periodicals, charts, etc., bearing on the Five Year Plans and their progress are displayed.

Broadcasting—All India Radio, Ahmedabad, Baroda, Rajkot and Bhuj broadcasts daily in the evening, a programme in Gujarati specially for the rural listeners. Till 31st December, 1966 the Government of Gujarat had installed 172 community receiving sets in the villages of the district. These sets are maintained and repaired by the Supervisor, Rural Broadcasting, who is stationed at Jamnagar.

Office of the District Statistical Officer

The Bureau of Economics and Statistics, Ahmedabad, is the apex office concerned with the collection and compilation of statistical data so very essential for planning and development programmes of the State. It has a statistical office in each district under a District Statistical Officer who is responsible for improving the quality of the basic statistics at the district level. Some of the important activities carried out by the District Statistical Officer are publication of District Statistical Abstract, collection of data pertaining to prices, progress of Community Development Programme and plan statistics and conduct of Socio-Economic Surveys. The District Statistical Officer now functions under the District Development Officer after the introduction of the Gujarat Panchayats Act, 1961.

CHAPTER XIII

LOCAL SELF-GOVERNMENT

INTRODUCTION—For the successful working of many of the welfare activities, implementation of development schemes and administration of public utility services undertaken by a welfare State, the units of local self-government like panchayats and municipalities offer the widest possible opportunities for their execution and working at lower levels down to the village and town, educating public opinion and enlisting popular support. A comprehensive and well-organised system of local self-government, therefore, forms an essential pre-requisite for the successful functioning of a democracy.

Feudalism and local self-government go ill together. It is no wonder, therefore, that except Nawanagar and Dhrol States and Okhamandal taluka of the former Baroda State, no other States or Thanas comprising the territories of Jamnagar district had municipalities. But village panchayats were established only in Okhamandal taluka of a progressive State like Baroda which had enacted the Gram Panchayats Act and enforced it since 1920. The remaining areas of the district did not have any panchayats, before Independence and so that civic life of the community naturally remained at a very low ebb.

MUNICIPALITIES

A beginning in respect of municipal administration was made in Nawanagar State by establishing a municipality in Jamnagar on 12th October, 1896. The municipality was run as a State department, and the Bombay District Municipal Act of 1873 was applied and followed for the administration of municipal affairs. The municipality received grants from the State in lieu of octroi. The principal towns in the mahals had municipalities looked after by the Mamlatdars who were assisted by local committees and Medical Officers. These municipalities were financed by the State and concerned only with the conservancy and lighting of towns. The municipal administration in the Dhrol State was carried on by the State, arranging for scavenging of public roads and providing streets with electric lights.

With the formation of the State of Saurashtra, the question of establishing municipalities in places having population of more than 5,000 was considered and a committee was appointed to draft municipal laws to suit local conditions. Pursuant to its recommendations, the Bombay

Municipal Boroughs Act, 1925 was applied to Jamnagar and other cities having a population of one lakh and over and the Bombay District Municipal Act, 1901 to the rest of the areas.

Prior to the implementation of the Gujarat Panchayats Act in 1963 there were 12 municipalities in the district, viz., Jamnagar, Jamjodhpur, Jodiya, Kalavad, Khambhalia, Salaya, Lalpur, Okha Port, Beyt, Bhanvad, Dhrol and Dwarka. The Democratic Decentralisation Committee appointed by the State Government recommended formation of gram panchayats at places having population of 10,000 and below, and nagar panchayats at places having population between 10,000 to 30,000. This recommendation was accepted and on the introduction of the Gujarat Panchayats Act of 1961 the number of municipalities was reduced to one. The one and only municipality that exists today in the district is the Jamnagar Borough Municipality, governed by the Gujarat Municipalities Act, 1963, enforced from 1st January, 1965. It provides for elected councillors and reservation of seats for women, Scheduled Castes and Scheduled Tribes. Every municipality constituted under this Act is vested with functions relating to establishing and maintaining primary schools, regulating or abating offensive or dangerous trades or practices, securing or removing dangerous buildings or places, arranging water supply or augmenting existing supply, drainage, public vaccination, cleansing and watering public streets, disposal of night soil and rubbish, medical aid, care of the sick at the time of outbreak of epidemics, establishing and maintaining public hospitals, acquiring and maintaining places for the disposal of dead bodies, naming of streets and numbering of premises, constructing, altering and maintaining public streets, slaughter houses, markets, etc., lighting public streets, places and buildings, extinguishing fires, protection of life and property of the people and registration of vital statistics. The Act empowers a municipality to levy taxes on buildings, lands, vehicles, water supply and drainage, lighting, etc., octroi on animals or goods, sanitary cess and a special cess on education.

Jamnagar Borough Municipality

The Jamnagar City Municipality was established by the State of Nawanagar in 1896. The present area within municipal limits admeasures 25·90 sq. km. According to the Census of 1961 it has a population of 139,681 persons. Out of 35 elected members, two seats are reserved for women and two for Scheduled Castes.

The municipality discharges its functions through committees mentioned below.

1 Executive Committee
2 Public Works Committee
3 Sanitary Committee
4 Legal Committee

5 Bus Committee
6 Water Works Committee
7 Purchase Committee
8 Education Committee
9 Planning Committee
10 Light Committee
11 Appeal Committee
12 Municipal Staff Selection Committee

The Chief Officer is the executive head of the municipality.

Income and Expenditure—The total income of the municipality exclusive of the opening balance of Rs. 2,617,709 was Rs. 4,350,127 and the total expenditure Rs. 4,341,829 in 1964-65, as seen from the following statement.

STATEMENT XIII.1

Income and Expenditure of Jamnagar Municipality for the Year, 1964-65

Sl. No.	Income	Rs.	Expenditure	Rs.
1	2	3	4	5
1	Rates and taxes	3,241,776	General administration and collection charges ..	324,380
2	Realisation under special Act	21,666	Public safety ..	671,169
3	Revenue derived from municipal property and power	172,395	Public health and convenience	2,600,759
4	Grants and contribution for general and special purposes	572,993	Public instruction ..	457,753
5	Miscellaneous	341,297	Miscellaneous ..	287,768
	Total income excluding the opening balance ..	4,350,127	Total	4,341,829
	Incidence of taxation per head of population ..	21.33	Expenditure per head of population ..	31.23

Source :
The Chief Officer, Jamnagar Borough Municipality, Jamnagar

The major activities of the municipality may be considered as under :

Water Supply—Prior to the construction of Ganga Sagar Tank and Water Works, the city of Jamnagar depended upon limited tube wells. Three tube wells were fitted with deep well pumps worked by electric energy with masonry tanks fitted with cocks having a capacity of 2,000 gallons. In order to obviate the difficulty arising out of scarcity of water, Nawanagar State constructed in 1937 Ranjit Sagar Lake from where it was piped to the water works and supplied to the city. Owing to the rapid growth of the city population and coming into existence of a number of new industries, the existing supply of water was found inadequate. Scheme estimated to cost Rs. 80·82 lakhs to expand the existing resources

was drawn up. In the first stage which is under construction since 1956, it is proposed to provide 45 lakh gallons of filtered water per day to the city. In the second stage 60 lakh gallons of filtered water per day is proposed to be provided, when the work in connection with underground drainage is also expected to be completed. An expenditure of Rs. 41·57 lakhs has been incurred till the end of the Third Five Year Plan. The works like gravity main, rising main, filter house, staff quarters, sump and pump houses and high level reservoir, are completed. The work of distribution system is nearing completion. The reservoir is constructed on the river Nagmati about 9·65 km. south of Jamnagar city. The water from the reservoir flows through the filteration plant and then passes through two filter beds each having a capacity of two million gallons per day. From the filter beds the water is brought into water sump from where it is pumped into a high level reservoir through a pipe of 30" diameter. Filtered water is distributed to the city since February, 1963.

Conservancy—The surface area of the roads is cleaned twice everyday. The total number of sweepers and scavangers employed was 567 in 1967. The approximate quantity of refuse collected is 8 truck loads per day. The average annual expenditure on its collection and removal comes to Rs. 13,500. The refuse is used for preparing compost manure.

Drainage—Prior to the construction of open surface drains in Jamnagar city, the disposal of rain and waste water took place through 70,000 cess pools. As this was unhygienic and caused malaria, the Jamnagar municipality constructed in 1951 open surface drains which are in existence even today for the disposal of waste water at a cost of Rs. 10 lakhs. Open surface drains also proved obnoxious to the public on account of overflow of water. The municipality, therefore, decided to construct underground drainage from Digvijay Plot to Navagam including areas like Sat Rasta, Panch Bangla and Railway Station. The construction was undertaken in 1964 at an estimated cost of Rs. 2·50 lakhs. The total cost of the entire drainage system for Jamnagar city is estimated to cost about Rs. 80 lakhs. The municipality proposes to spend Rs. 40 lakhs during Fourth Five Year Plan, and the balance in subsequent years.[1]

Public Safety—The fire brigade has five fire engines in charge of a trained Fire Brigade Superintendent.

Roads—The total length of roads maintained by the municipality in 1965-66 was 135 km. of which 110 km. were asphalted and 25 km. metalled. Avenues of trees are maintained by the municipality for which regular programme of planting trees has been chalked out. During the years 1964-65 and 1965-66, 1,200 new trees were planted.

1. For details see Chapter XV—Medical and Public Health Services

Street-lighting—There were 3,747 lights in 1965 out of which 2,158 were ordinary lights, 1,505 tubelights and 84 mercury lights. The annual expenditure on street lighting incurred by the municipality in 1964-65 was Rs. 108,000.

Gardens—The municipality maintains four gardens, viz., (1) Jubilee Garden, (2) Kamla Nehru Park with children's corner, (3) Azad Baug, and (4) a garden near the Pump House. The garden at Pump House has been constructed recently and is equipped with a fountain with an arrangement for spraying coloured water. It is situated on the way to Ranjit Sagar Lake. The municipality also maintains two public radio sets, one each at Jubilee Garden and Ranjit Memorial.

Markets—The municipality has constructed a number of markets in different localities, important among them are Subhas Fruit and Vegetable Market, Cloth Market and Fish Market.

Subhas Vegetable and Fruit Market—This market was constructed during the time of the former Nawanagar State for the sale of vegetables and fruits. In all there are 287 stalls which are also provided with storage facility. The market has electric lights and is periodically washed and disinfected by the municipality. The design of the market is circular. Approximate income from this source comes to Rs. 40,000 per year.

Cloth Market—This market was constructed in the year 1959 at a cost of Rs. 130,000 There are 138 shops provided with rolling shutters. They mostly deal in cloth and sundry materials. It fetches an annual income of Rs. 27,900.

Market near Irwin Hospital—This market comprises a row of 41 shops, where all sorts of marketable goods are available. The market was constructed in 1963-64 at an approximate cost of Rs. 73,008.

Market at Khijda Mandir—Vegetables, fruits and sundries are sold in this market. Constructed in the year 1962-63 at a cost of about Rs. 65,000 the market has 50 shops.

Fish Market—A modern fish market with 31 stalls having facilities for storing and packing fish, was constructed in 1965-66 near Panwala Kotha at an approximate cost of Rs. 46,500. The market is provided with lighting and water facilities, swept by municipal sweepers and also periodically washed and disinfected.

Education—The municipality has been looking after primary education from 1st June, 1966. The work has been entrusted to the Nagar

Prathmik Shikshan Samiti which has 58 primary schools under its control. Municipality also runs 8 Balmandirs and one Balbhavan.

Housing—Since 1952-53 the municipality has provided 150 quarters to municipal sweepers, built at a cost of about Rs. 2 lakhs.

Bus Service—The municipality operates its own bus service since 1963 on seven routes with a fleet of 20 buses.

TOWN PLANNING SCHEME

In the district, town planning received great attention in the former Nawanagar State, during the regime of the late ruler Jam Ranjitsinhji. But these activities were confined to and concentrated in Jamnagar town, the capital of Nawanagar State, which was the recipient of all the benefits accruing therefrom. Explaining the aims and objects of the scheme, the Jam Saheb in one of the speeches delivered after his accession to the throne observed that, "one of my earliest concerns was to improve the sanitation of the city and its health, which was not of the best, with chronic visitations of plague, cholera and malarial fevers, which medical efforts could not combat or control. In 1914, I took in hand a wide scheme of city improvement which with loyal co-operation of my subjects, has now resulted in much visible progress, wide roads, decent bazars, parks and places of recreation and in decreasing its mortality."[1]

The various stages in which the town planning operations progressed are described thus in the Administration Report of the Nawanagar State for the year 1932-33.

> "The first step His Highness took was to clear from the centre of the city the Matwavad with 2,000 cattlemen and animals, huddled together as they were in deeply congested locality. This quarter was dismantled and totally cleared; the cattlemen and their animals were removed outside the Khoja gate where new and commodious buildings were erected for them. A natural breeding ground for disease of every kind was thus at a stroke destroyed. Next, the Khajuria Bazar, equally congested and unhealthy, was eliminated, and the road in front of the Jam-na-Dera was opened. Wherever ground was cleared, shops were built under a properly supervised system of construction; broad roads and footpaths were laid out and the surface was spraymexed to prevent dust."[2]

1. *Administration Report of the Nawanagar State for the year*, 1924-25, p. 25
2. *Ibid.*, 1932-33, p. 117

Jamnagar, it may be noted, is a walled city with several gateways which conforms to the traditional lay-out of Gujarat towns. It, however, differs from others in that its charm as in the case of Baroda, lies in the combination of old and new. The late Jam Ranjitsinhji popularly known as Jam Ranji, well-known cricketer, endowed it with a modern look and ornamented it with imposing facades, squares, circles and broad streets laid down in a systematic manner, which has given it the name of the "Paris of Saurashtra". Its well-planned streets and healthy open spaces also evoked lavish praise from outsiders who were greatly impressed by its town planning, which served as a model for similar operations elsewhere.

After the formation of Saurashtra State, the Government of Saurashtra enacted the Town Planning Act, 1955. But the Act was inoperative for want of rules which were framed in 1960 by the Government of Gujarat. The preparation of a development plan for Jamnagar city was taken up on behalf of the Jamnagar Borough Municipality under the Saurashtra Town Planning Act, 1955 by the Deputy Consulting Surveyor to Government at Rajkot during the Third Five Year Plan. This plan is now ready and is under the active consideration of the municipality and the State Government. The other two places to which town planning activity is being extended are Hapa in Jamnagar taluka and Jamjodhpur in Jamjodhpur taluka. Broad lay-out plan has already been prepared for Hapa in Jamnagar taluka and handed over to the District Development Officer for its implementation. The broad lay-out plan for Jamjodhpur is under preparation and that of Dwarka town is to be taken up.

DISTRICT LOCAL BOARD AND ITS ACTIVITIES—The Board had 30 members nominated by the Government. The principal sources of revenue for the Board were its share of cess on the land revenue statutorily payable to the District School Board and other development grants sanctioned by the Government. Other important sources of income were civil works and local rates. The major heads of expenditure were civil and public works and medical. The total income and expenditure of the Board during 1962-63 before its dissolution on the introduction of the Gujarat Panchayats Act in 1963, were Rs. 5,297,623 and Rs. 4,603,473 respectively.

PANCHAYATS

If the attainment of political freedom has any meaning for the rural areas, it should provide them with the means and opportunities for economic and social betterment. To achieve these objectives, the people must have their own organisation for evolving and implementing rural development programmes, which cannot be better fulfilled than through the institutions of village panchayats. The Planning Commission has rightly assigned a place of pride to the panchayats in the task of decentralising the local

administration and in giving them the necessary scope for initiative, planning and execution of schemes aiming at the welfare and development of the village economy. "While operating through the people's local organisations, the programme simultaneously strengthens the foundations of democracy on which our constituion stands by making the villager understand the significance of development, and it makes him realise his position in this vast democracy."[1] The establishment of village panchayats thus became indispensable for achieving alround economic development and growth of a democracy.

There were no village panchayats in the territories of Nawanagar and Dhrol States, which now form part of Jamnagar district. Okhamandal taluka, which formed part of Baroda State prior to the integration of princely States into the State of Saurashtra, was the only area which had village panchayats prior to Independence.

Saurashtra Gram Panchayat Ordinance, 1949—After the formation of the State of Saurashtra, in its first policy announcement that Government declared its intention of establishing gram panchayats in villages. With this object in view, the Saurashtra Gram Panchayat Ordiance was promulgated in 1949. It was a special enactment framed against the background of the abject subservience to which villages were subjected in the past.

According to the Ordinance, a panchayat could be established (1) in villages having a population of over 2,000 and below 10,000. The panchayat was an autonomous body elected from the village assembly of adult residents of the village. A full-fledged panchayat functioned not only as an administrative and civic body of the village but also as the revenue collecting agency on behalf of the Government and a local judiciary for petty criminal offences and civil wrongs.

On the basis of their efficiency, the village panchayats were classified into 'A', 'B' and 'C' classes. Functions delegated to them differed according to the class to which they belonged. The 'C' class panchayats had all the administrative powers and duties which were very extensive and did not leave out anything concerned with the civic life of the village. The 'B' class panchayats had additional powers and duties for the collection of land revenue, wider powers to try some cases under the Indian Penal Code, the Cattle Trespass Act and the Vaccination Act. The 'A' class panchayats in addition tried suits for money due on personal loans and contracts not affecting any interest in immovable property when the amount did not exceed Rs. 100.

1. Government of Gujarat, *Report of the Democratic Decentralisation Committee*, Part-1, p 1, 1960

The main source of revenue for the panchayats was share in land revenue granted by the Government. Prior to 1st April, 1956, 'A', 'B' and 'C' class panchayats got respectively an annual grant of 30 per cent, 25 per cent and 13½ per cent of the land revenue collected in the village. From 1st April, 1956, this was raised to 33, 30 and 25 per cent respectively for 'A', 'B' and 'C' class panchayats, which levied either octroi or house tax. After the reorganisation of States in 1956, the Bombay Village Panchayats Act, 1958 was passed to provide a unified law in place of various enactments in existence in different parts of the State. This Act became operative from 1st June, 1957. According to it panchayats were divided into two classes 'A' and 'B', and the scale of grant-in-aid was also revised and fixed at 30 and 25 per cent respectively.

Saurashtra Gram Panchayat Madhyastha Mandal—By an amendment in 1950, a statutory body called the Saurashtra Gram Panchayat Madhyastha Mandal, was established for encouraging the formation of panchayats and looking after and guiding the development and working of the panchayat institutions. The Saurashtra Gram Panchayat Madhyastha Mandal was composed of the Minister for Local Self-Government, the Chief Secretary, the Secretary of Revenue Department, the Chief Panchayat Officer and five other members, one from each district nominated from among the members of the Legislative Assembly by the Government. Collectors of all the districts and seven other members nominated by the Government from the whole of Saurashtra were added to the Mandal or Board. The Board was thus composed of 21 members and presided over by the Minister for Local self-Government. The members held office for two years. The general meeting was held once in two months. A committee of seven members called the Executive Committee was constituted to transact business for the Board. It was competent to exercise all the powers and duties of the Central Board and appoint committees

District Panchayat Board—The District Panchayat Board was established more or less on the basis of the District Local Board under the Saurashtra District Panchayat Act, 1956 with a view to make the rural population take active interest in the administration of their day-to-day affairs as well as for taking speedy measures for tackling local problems like public health, primary education, medical care, water supply, etc. The functions of the Board were divided into obligatory and discretionary. The obligatory functions included the construction and repair of roads, markets, *dharmashalas* and other public buildings, public tanks, wells and vaccination. The discretionary functions were very wide and included a number of activities under agriculture, animal husbandry, education and village industries.

The Halar District Panchayat Board was established on 1st July, 1956. The Board consisted of 13 members. After formation of bilingual State

of Bombay in 1956 the Bombay Local Boards Act was fully applied to Saurashtra in place of the Saurashtra District Panchayat Act and as a consequence the District Panchayat Board was replaced in 1960 by the District Local Board in the districts of Saurashtra. The Jamnagar District Panchayat was thus renamed Jamnagar District Local Board from 11th April, 1960.

Democratic Decentralisation—The First Five Year Plan stressed the role of local bodies in the implementation of development programmes and indicated that the general policy of Government should be to encourage them in assuming responsibility for as large a portion of administrative and social services within their areas as may be possible. As these local bodies depended mostly upon Government grants which were subjected to various conditions and restrictions their activities were too limited to produce any noticeable impact in rural areas, and the real object underlying the formation of local self-governing institution was frustrated.

The proposals of the Planning Commission for the Second Five Year Plan, as accepted by the Parliament, stressed " the need for creating within the district a well organised democratic structure of administration in which the village panchayats will be organically linked with popular organisations at a higher level. In such a structure the functions of the popular body would include the entire general administration and development of the area, other than such functions as law and order, administration of justice and certain functions pertaining to the revenue administration. With this background before it the Balvantray Mehta Committee appointed to go into the question of the working of Community Projects and National Extension Service held that community development cannot progress without responsibility and power which would be possible only under a process of democratic decentralisation from village to district level. They further held that community development can be real only when the community understands its problems, realises its responsibilities, exercises its necessary powers through its chosen representatives and maintains a constant and intelligent vigilance on local administration. With this object in view, they recommended an early establishment of statutory elective local bodies which alone could lead to effective rural development. They also recommended that necessary resources, powers and authority should be vested in such bodies. In effect the Balvantray Mehta Committee recommended that if the experiment of democratic decentralisation were to yield maximum results, it was necessary that all the three tiers of the schemes, viz., Village Panchayat, Panchayat Samiti and Jilla Parishad should be started at the same time and operated simultaneously in the whole district."[1] In May

1. Trivedi, R. K., Census of India 1961, Vol. V, Gujarat Part I-A (i), *General Report on the Census*, pp. 128-29

1958, the National Development Council accepted the recommendation of the committee with regard to "democratic decentralisation" and resolved that State Governments should accelerate the process for the establishment of democratic institutions functioning either at the village level or at the block or taluka level or district level. The process of democratisation should be completed as speedily as possible. As agreed in the meeting of the Standing Committee of the National Development Council in January, 1958, the pattern of democratisation would be worked out by the State Governments in the light of their own conditions and requirements. As a consequence of this decision Government of Gujarat appointed a committee in July, 1960 under the chairmanship of the Revenue Minister to study this question and to make recommendations for its implementation. The committee submitted its report on 31st December, 1960. These recommendations were incorporated in the Gujarat Panchayats Act, 1961 which provided for a three tier system, viz., the gram/nagar panchayats which were already in existence at the lowest level, taluka panchayats at the taluka level and district panchayats at the district level.

The Gujarat Panchayats Act, 1961—Panchayati Raj was ushered in the districts of Gujarat on April 1, 1963 when taluka and district panchayats providing the middle tier of the democratic decentralisation scheme were formally inaugurated. The introduction of the scheme which vests the elected bodies at all the levels with wide powers and provides them with necessary funds and trained administrative personnel was completed with the formation of the State Panchayat Council on May 1, 1963.

Gram Panchayats—All adult persons whose names appear on the electoral roll of the State Legislative Assembly and are residents of an area comprising a revenue village or a group of revenue villages or hamlets forming part of a revenue village constitute the gram sabha. It holds at least two meetings every year. It considers the administration report and annual accounts of the panchayat and also the development and other programme of works for the ensuing year.

The gram sabha elects from among its members the executive body which is called a gram panchayat when the population of the village does not exceed 10,000 but it is called a nagar panchayat when it exceeds 10,000 but not 30,000.

The number of members of a gram panchayat varies from 9 to 15 including a Sarpanch and an Upa-Sarpanch and that of a nagar panchayat from 15 to 31 including a Chairman and a Vice-Chairman. Provision has been made to reserve at least two seats for women and one seat for Scheduled Castes and Scheduled Tribes. Duties of a gram/nagar panchayat as scheduled in the Act relate to a variety of subjects covering sanitation, health, public

works, primary education, law and order, planning, community development, cultural activities, etc. Collection of land revenue, maintenance of land records, and duties and functions of a village accountant are also transferred to the gram/nagar panchayats. Provided its funds permit it has the discretion to take up certain other activities such as education, medical relief, promotion of social, economic and cultural well-being of the inhabitants of its area and arranging public receptions, ceremonies or entertainments within its jurisdiction.

Taluka Panchayats—The taluka panchayat has as its members Sarpanchas of all gram panchayats/Chairmen of all nagar panchayats within the taluka as *ex-officio* members and about one-tenth of the number are elected by Chairmen of Co-operative Societies within the taluka. It co-opts as members, two women interested in welfare activities pertaining to women and children, two representatives of Scheduled Castes, two of Scheduled Tribes and two social workers of the area having practical experience of matters pertaining to rural development. Local members of the Legislative Assembly, Mamlatdar or Mahalkari of the taluka or mahal, Presidents of municipalities in the taluka and elected members of the district panchayat ordinarily residing in the taluka are its associate members.

Functions of the taluka panchayat as scheduled in the Act range from subjects relating to sanitation, health, education, culture, social education, community development, agriculture, irrigation, animal husbandry, village and small scale industries, co-operation, women's welfare, social welfare, rural housing, pastures and relief against natural calamities. As in the case of gram/nagar panchayats, a number of discretionary functions has been invested in taluka panchayats also.

District Panchayat—The district panchayat consists of (a) *ex-officio* members (Presidents of all taluka panchayats in the district), and (b) elected members. The latter include (i) one member elected by each constituent taluka panchayat, and (ii) those elected directly. The nature of direct election to the district panchayat is as follows·

For the purpose of election of members to a district panchayat under clause (iii) of sub-section (b) of Section 15 of the Gujarat Panchayats Act, 1961, the State Government shall divide each district into as many single-member territorial constituencies as there are seats determined under that clause and delimit their extent. Two of the seats intended for directly elected members are reserved for women, one or more seats for Scheduled Castes and one or more seats for Scheduled Tribes, according to population, if it is not less than five per cent. There will be two co-opted members having experience of matters pertaining to education and residing in the district. Associate members will include (1) Local Members of Parliament, (2) Members of

Legislative Assembly, (3) the District Collector and (4) Presidents of all municipalities in the district. The President and Vice-President of the district panchayat are elected by the members from amongst themselves.

District panchayat is vested with administrative and executive powers. It is responsible for various developmental activities in the district, such as establishing and maintaining dispensaries, public health centres and allied institutions. It has been entrusted with a wide range of educational activities. It manages primary education and uses the agency of taluka panchayats to supervise it. It co-ordinates and integrates community development schemes and looks after the development of irrigation, agriculture, animal husbandry, public health and medical relief, social welfare, cottage and small scale industries, collection and maintenance of statistics, etc. All these functions have been transferred on an agency basis to the district panchayat. A large number of executive functions such as registration of co-operative societies, approval of amendment to their bye-laws, calling of or extending the period for the calling of annual general meeting of co-operative societies and such other functions as under the Co-operative Societies Act were exercised by the Registrar, Co-operative Societies, have also been transferred to district panchayat.

Administrative Machinery—In order to carry out various duties and functions entrusted to the district and taluka panchayats under the Gujarat Panchayats Act, 1961 and other Acts, a hierarchy of administrative machinery has been devised and experienced personnel transferred to man it. The District Development Officer is the chief executive officer for the district panchayat and so is the Taluka Development Officer at the taluka level. In order to enable them to discharge their executive functions efficiently, these officers are given certain powers which are laid down in Sections 123 and 143 of the Gujarat Panchayats Act, 1961.

With the transfer of many of the departmental schemes and activities, a large number of district level functionaries have also been transferred to the district panchayat. These are . Executive Engineer; District Health Officer; Deputy Collector (Revenue); District Village Panchayat Officer; District Agricultural Officer, District Animal Husbandry Officer; District Statistical Officer; Assistant District Registrar, Co-operative Societies; District Backward Class Welfare Officer; Administrative Officer, Education; and Accounts Officer.

At the taluka level, the Taluka Development Officer is assisted by extension officers in various fields, viz., agriculture, co-operation, industries, social education, etc. At the village level there is a Talati-*cum*-Secretary who looks after the collection of land revenue and maintenance of records of the gram panchayats.

Progress in the Establishment of Panchayats—It has been seen previously that the Saurashtra Gram Panchayat Ordinance, 1949 was promulgated immediately after the integration of princely States. The progress, therefore, in the establishment of panchayats was quick. During the First Five Year Plan 552 panchayats were established. The number of gram panchayats which stood at 616 in 1959-60 rose to 650 in 1962-63, 4 nagar panchayats in the district are Bhanvad, Jamjodhpur, Khambhalia and Dwarka. The taluka panchayats numbered 10.

Cultural and Social Activities of the Panchayats—A number of social and cultural activities such as libraries, night classes for social education, Balmandirs, etc., are conducted by the panchayats. The statement given below indicates the progress made by the panchayats in the sphere of cultural and social activities during the years 1961-62 and 1964-65.

	Name of the activity	Year	
		1961-62	1964-65
1	Night classes for social education	148	39
2	Reading rooms	115	196
3	Reading rooms and Libraries	167	204
4	Balmandirs and Balkridangans	50	62
5	Ras Mandalis and Bhajan Mandalis	96	140

Source :
The District Development Officer, Jamnagar District Panchayat, Jamnagar

From the statement it can be seen that the cultural and social activities of the panchayats have increased substantially. In 1961-62, 115 panchayats provided facilities of newspapers and periodicals, while in 1964-65 the number of such panchayats rose to 196. Similar increase is also witnessed in respect of Balmandirs, Balkridangans and Ras and Bhajan Mandalis.

Sources of Income—The panchayats have been given necessary funds to execute all schemes transferred to them. The Act also provides for the levy of taxes and fees by the various tiers of panchayats. The gram and nagar panchayats are empowered to levy octroi, fair and entertainment tax, shops and hotel tax, cycle and animal driven vehicle tax, etc. Similarly the taluka panchayats can levy education cess, impose taxation to the extent of 15 per cent of the taxes levied by the gram and nagar panchayats and with a request to the Government collect a surcharge not exceeding 15 per cent on the stamp duty on sales, mortgages or leases executed within their jurisdiction. The district panchayat can levy taxes on all or any of the items included in the schedule for the gram or nagar panchayats but the same should not exceed 10 per cent of the taxes levied or leviable by the latter. The district panchayat also, as in the case of taluka panchayat, can request Government to levy a surcharge of 10 per cent on the stamp duty.

In addition to grants for schemes transferred to the panchayats, the most important source of panchayat income is land revenue. The share of land revenue payable to them is determined by the Government on an average of land revenue collected or recovered in the village during the preceding 3 years, 25 per cent of this amount is reserved for expenditure on pay, training, etc., of panchayat Secretaries and 5 per cent for State Equalisation Fund. From the balance, 50 per cent are paid to village panchayats, 25 per cent to taluka panchayats, 10 per cent to the district panchayat, 7½ per cent to District Equalisation Fund and 7½ per cent to District Gram Encouragement Fund.

The Act empowers the State Government to levy cess on land revenue for the panchayats and hand it over to the district panchayat after deducting collection charges. At the rate of 20 paise per rupee of land revenue, this amount came to Rs. 310,296·15 in the years 1965-66 in the district.

Income and Expenditure of Gram, Taluka and District Panchayats—From Statement XIII·2, it is observed that the total income of gram panchayats, taluka panchayats and district panchayat in 1965-66 was Rs. 1,325,800·56, Rs. 7,975,764·94 and Rs. 5,887,668·26 respectively. In the year 1965-66 the income per head amounted to Rs. 215 for gram panchayat, to Rs. 12·07 for taluka panchayat and to Rs. 8·76 for the district panchayat.

STATEMENT XIII.2

Income of Gram Panchayats, Taluka Panchayats and District Panchayat, 1965-66

Gram Panchayats	Rs.	Taluka Panchayats	Rs.	District Panchayat	Rs.
1	2	3	4	5	6
Government Grants (Land Revenue	488,592.23	Government Grants	7,475,103.09	Government Grants	4,147,729.11
Gifts and Donations	257,886.11	Statutory Grants as Land Revenue Grants	438,910.85	Statutory Grants (Education and Medical)	485,886.00
Taxes and Fees, etc.	579,322.22	From District Panchyat's own fund	61,751.00	Land Revenue	943,758.00
				Local Fund Cess (Cess on Land)	310,296.15
Total ..	1,325,800.56		7,975,764.94		5,887,668.26

Source :
The District Development Officer, Jamnagar District Panchayat, Jamnagar

Statement XIII·3 shows items on which expenditure is incurred by gram panchayats, taluka panchayats and district panchayat.

STATEMENT XIII.3

Expenditure of Gram Panchayats, Taluka Panchayats and District Panchayat, 1965-66

Sl. No. 1	Gram Panchayats 2	Rs. 3	Taluka Panchayats 4	Rs. 5	District Panchayat 6	Rs. 7
1	Sanitation and health ..	428,213.90	1 Sanitation and health ..	3,933,583.97	1 Sanitation and health	208,417.06
2	Public works ..	515,716.55	2 Public works ..	49,021.49	2 Public works ..	.. 2,869,662.59
3	Education and culture ..	88,244.78	3 Education and culture ..	4,264,963.87	3 Education and culture	298,940.55
4	Administration	283,462.83	4 Administration ..	625,612.23	4 Administration	302,590.94
5	Welfare of people ..	13,315.79	5 Welfare of people ..	7,942.90	5 Welfare of people ..	137,071 11
6	Agriculture, preservation of forests and animal husbandry	6,866.67	6 Agriculture, preservation of forests and animal husbandry ..	1,059,424.75	6 Agriculture, preservation of forests and animal husbandry .	321,480.36
7	Village and cottage industries	96,935.27	7 Village and cottage industries	..	7 Village and cottage industries ..	19,967.84
8	Collection of land revenue and maintenance of land records	12,838.10	8 Collection of land revenue and maintenance of land records ..	..	8 Collection of land revenue and maintenance of land records ..	..
9	Village defence, etc. ..	55,186.56				
	Total	1,500,780.75		9,940,549.21		4,158,130.45

Source :

The District Development Officer, Jamnagar District Panchayat, Jamnagar

CHAPTER XIV

EDUCATION AND CULTURE

Education and culture go together and have a distinct bearing on the life of the community and the individual. Culture reflects the moral values established by a society, the stage of development attained by it in the sphere of literature, art, and music, and approach towards life and fellow beings. Education connotes both the stages as well as the contents of culture, and is an important factor in moulding it. Education has also been considered to be a very potent force in giving meaning to the concepts of social justice and equal opportunity. There is an intimate link between education and economic progress too, as also between poverty and illiteracy. It is the most important factor in achieving rapid economic development. It has, therefore, a very important role to play in moulding the life of the individual and the people.

HISTORICAL BACKGROUND—From the dawn of Aryan civilization in India, the values, ideas and forms of discipline of the people had been moulded by the intellectual audacity about the meaning and purpose of life. These were reflected in the religious teachings, epic recitals and a well regulated system of education. In the educational system evolved by the Aryans, a fairly long period of education was laid down. The initiation into *brahmacharya* was the starting point when the educational career of the student actually began, with a chosen *guru*, as the guide and philosopher. The father of the boy was himself a preceptor in the Vedic period, and taught what a son ought to learn. Schooling through *gurukula* was the order of the day, where strict adherence to rules and regulations was insisted upon. The student had to go to the *guru's ashrama* for study and stay there till he completed his education. The residential atmosphere in the *gurukulas*, which enforced strict discipline, was to a great extent conducive to the formation of the character of these pupils. The *guru* was held in high esteem and his word was law to his pupils. Admission of deserving students in the *guru's ashrama*, for study was open to all, rich and poor alike With the passage of time, the *gurukula* system of learning became less popular. For centuries thereafter, this region along with other regions of Saurashtra presented rather a bleak picture of warring principalities, which cared little for the educational or cultural advancement of the people. This had a calamitous effect upon the social and economic fibre of the region. Peace and stability began to be restored after Col. Walker's Settlement in 1807, where after the foundations of an integrated machinery for law and order were laid, paying the way for progress and growth of educational and cultural activities in Saurashtra. State run schools and institu-

tions began to function. But much headway could not be made during the major part of the 19th century, as neither the State authorities nor the leading men of the time showed a keen interest in education. Describing the condition of education in Saurashtra, that was equally applicable to this district, the then Political Agent of Kathiawar, in 1842 wrote; "In point of education Kathiawar ranks very low. Few of the chiefs can read or write; and the persons who manage their affairs know little or nothing beyond their immediate sphere. Books are rare and are not appreciated. In every town some small provision is made for schooling but the funds set apart for this purpose are inadequate. I regret that the chiefs and other leading men have shown the most entire apathy on the subject of education ".[1]

In 1846, Mr. Malet the then Political Agent of Kathiawar, laid foundation of the modern educational system by recommending that under the direction of the Agency an English and a vernacular school should be opened in Rajkot. This was the first school of such a type to be opened in Kathiawar. At Mr. Malet's instance the then Jam of Nawanagar agreed to give a yearly subscription of one per cent of his tribute. Some other rulers followed suit. It was proposed that Government and the Gaekwad should supplement the sum by granting a contribution of two per cent of their tribute. But neither the Government nor the Gaekwad agreed to grant even one per cent from the tribute they received.[2] The Political Agent was of the opinion that if education was to be established on a firm basis, it would be necessary not only to open a central school at Rajkot, but schools at all the large towns of the peninsula. But the chiefs were slow to adopt such a suggestion and none of them was willing to support a school at Rajkot or to agree to anything more than to maintain schools at their own capitals. Later on, the chiefs began to take some interest in education. Vernacular schools were opened at the capitals of most of the leading States. In Nawanagar there was a school in which English and Gujarati were taught by three masters. And the then Jam of Nawanagar who was a young man voluntarily undertook the task of learning English and by his example thus to inspire others The representatives of States were averse to the levy of any school fee. But the Political Agent so strongly opposed the free admission of pupils, that it was at length settled that fees should be charged. In Kathiawar a fee of one anna was charged without distinction as to standard. There was a re-entrance fee of four annas for boys who left school once, but re-entered it within one year. No fees were, however, charged in the Sanskrit, Urdu and girls' schools.

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1. *Gazetteer of the Bombay Presidency*, Vol. VIII, (Government Selections XXXVII-48), *Kathiawar*, Bombay, p. 343, 1884
2. *Ibid.*, Vol. VIII, *Kathiawar*, pp. 343-44, 1884

In the Okhamandal region, that formed part of the Gaekwad territories then, it was only after 1871 that the State began to take increasing interest in education. The number of schools in the region then began to increase.

In Nawanagar State, according to the 1872 Census there were 44 schools[1] of the following categories run by the State.

Sl. No. 1	Type of schools 2	Numbers 3	Sl. No. 1	Type of schools 2	Numbers 3
1	High School	1	5	Vernacular Schools not on Fund	1
2	First Grade Anglo-Vernacular-school ..	1	6	Girls' Schools on Fund ..	6
3	Second Grade Anglo-Vernacular-School ..	..	7	Girls' Schools not on Fund	..
4	Vernacular Schools on Fund	35		Total . ..	44

The number of schools in Nawanagar by about 1881-82 increased to 55 and that of pupils to 4,405.[2] In the Okhamandal region during the same year there were 13 State run schools with 865 students.[3] Of these, 5 schools with 381 students were located in Dwarka alone, the details of which are as under.

Sl. No. 1	Type of school 2			Number of schools 3	Number of students 4
1	Gujarati boys' schools	..	..	2	256
2	Gujarati girls' school	..	..	1	83
3	Sanskrit Pathshala	..	..	1	26
4	Sanskrit Ved Shala	..	..	1	16
	Total ..	..	..	5	381

Besides these there were some indigenous schools conducted mostly by Brahmins.

The increase in the number of schools and students was, however, generally confined to primary classes; only a few students studied beyond that stage. In 1881-82 five students were sent for the Matriculation examination from the Nawanagar State, but none of them was declared successful.

As a first step towards the progress of education in Nawanagar State, the Government of the State made primary education free in 1911. This was followed by making secondary education free in 1916. Dhrol State which

1. WATSON, J. W., *Statistical Account of Nawanagar State being the Nawanagar Contribution to the Kathiawar Portion of the Bombay Gazetteer*, Bombay, pp. 44-45, 1879
2. *Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar*. Bombay, p. 345, (footnote) 1884
3. *Ibid*., Vol. VII, *Baroda*, p. 482, 1883

forms part of this district, also made primary education free in its territory in 1914. These measures were an incentive to the progress of education in the areas of the district. This progress is reflected by the rise in the number of institutions maintained by the State and pupils in the Nawanagar State between 1901-02 and 1943-44 for which figures are available.

Number of Institutions maintained by the State and Pupils in Nawanagar State, 1901-02 to 1943-44

Year 1		Number of institutions 2	Number of pupils 3	Year 1		Number of institutions 2	Number of pupils 3
1901-02	..	122	10,498	1931-32	..	253	21,617
1911-12	..	141	12,187	1941-42	..	294	27,804
1921-22	..	204	17,367	1943-44	..	300	26,817

Source :

Administration Reports of Nawanagar State.

It can be seen that there has been an appreciable increase in the number of institutions and pupils both between 1881-82 and 1901-02, as also in the subsequent periods. In the initial period of twenty years since 1881-82, the number of institutions rose from 55 to 122 and the number of students from 4,405 to 10,498. Between 1901-02 and 1943-44 the increase in the number of institutions during the decade 1911-12 to 1921-22 has been quite noteworthy. Of the 300 State maintained institutions in 1943-44, there were 4 high schools including one for girls, 27 middle schools, 1 drawing class, 1 commercial class, 215 primary schools for boys, 31 primary schools for girls, and 21 grant-in-aid schools. Besides these, there were 28 other private institutions consisting of Sanskrit Pathshalas, Balmandir and other special institutions. In the Dhrol State there were 1 English middle school, 17 vernacular schools for boys, and 3 vernacular schools for girls. Most of the institutions in these two states were state run.

PROGRESS OF EDUCATION AFTER INDEPENDENCE—After the formation of the State of Saurashtra in 1948, the progress of education in the district was rapid, as can be seen from the following statement.[1]

Year 1		Primary schools (including Basic Schools) 2	Pupils 3	Secondary schools 4	Pupils 5	Colleges and Technical Institute 6	Pupils 7
1950-51	..	278	N.A.	16	5,516	..	..
1955-56	..	691	49,492	22	7,909	2	352
1960-61	..	739	71,756	53	11,045	5	1,170
1965-66	..	792	106,101	59	15,373	5	1,982

Source :

Educational Inspector, Jamnagar

1. Figures for the years 1950-51 and 1955-56 relate to Halar district and those for years 1960-61 and 1965-66 to Jamnagar district.

The number of educational institutions increased from 294 in 1950-51 to 856 in 1965-66. The total number of pupils has also increased, but in a greater proportion than was the case with institutions. There was a very great advance in the number of primary schools including basic schools and students as can be seen from the above table. While the number of secondary schools has more than trebled, that of colleges and technical institutes and students has shown appreciable progress.

LITERACY IN THE FORMER NAWANAGAR STATE—It would be interesting to analyse the figures of literacy prevailing in the former Nawanagar State in order to have a correct perspective of the increase of literacy in the district. According to the first Census of 1872, "27 per cent of the total Hindu male population were able to read or write or were under instruction, ½ per cent of the Hindu female population could read or write or were under instruction, 15 per cent of the total Musalman male population could read or write or were prosecuting their studies, while 1/3 per cent of Musalman females could read and write, or were prosecuting their studies."[1] According to the Census of 1931 literates per every thousand persons in Nawanagar State were 140 aged 5 years and over. The corresponding proportions for males and females were 230 and 47.[2]

GROWTH OF LITERACY SINCE 1951

The first Census conducted in the district, as constituted then, after the formation of Saurashtra State revealed that the percentage of literacy in respect of those aged 5 and over was 17·72-25·08 per cent of males and 10·17 per cent of females.

According to the 1961 Census there were 219,969 literates in the district aged 5 years and over which formed 32·00 per cent of those ages, and 26·55 per cent of the total population. Of the total literates, 154,352 were males and 65,617 were females who respectively formed 43·81 per cent and 19·58 per cent of the population of each sex, aged 5 years and over, against 36·38 per cent males and 16·24 per cent females of the total population. Among the literates, 95,737 or 43·52 per cent lived in villages and 124,232 or 56·48 per cent in towns. Among literates living in the country-side 73,269 or 76·53 per cent are males and 23·47 per cent females. Corresponding proportions among town dwellers are 82,083 or 65·27 per cent for males and 43,149 or 34·73 per cent for females The literacy figures of 1951 and 1961 give a broad indication of the general increase in literacy

1. WATSON, J. W., *Statistical Account of Nawanagar State being the Nawanagar Contribution to the Kathiawar Portion of the Bombay Gazetteer*, Bombay, pp. 44-45, 1879.
2. *Western India States Agency Report*, 1931, Part I, Chapter XI, p. 122

in the district both among men and women. The percentage of general literacy, however, increased from 17·72 in 1951 to 26·55 in 1961.

LITERACY AND EDUCATIONAL STANDARD

Literacy—The percentage of literacy for both the sexes was the highest in 1951 in Jamnagar taluka 32·90 per cent males and 15·85 per cent females. It was the lowest in the Kalavad taluka where 12·79 per cent of males and 3·28 per cent of females were literate. The Census of 1961 shows a different pattern as revealed by the following table giving details of literacy for the rural and urban areas of the talukas of the district.

STATEMENT XIV.1

Rural/Urban Literacy by Sex, 1961

Sl No.	Taluka		Rural/ Urban	Literates (number)	Percentage to total population	Literate males	Percentage to total male population	Literate females	Percentage to total female population
1	2		3	4	5	6	7	8	9
1	Jamnagar	..	R	17,005	20·35	14,023	31·28	3,882	9·00
			U	75,706	45·06	49,457	56·08	26,249	32·89
2	Dhrol	..	R	4,345	17·02	3,301	25·65	1,044	8·25
			U	4,090	41·90	2,775	56·29	1,324	27·28
3	Jodiya	..	R	12,903	24·06	9,881	37·16	3,022	11·18
			U	3,003	38·40	1,921	52·07	1,082	26·19
4	Kalavad	..	R	10,914	16·62	8,553	25·65	2,391	7·36
			U	3,704	41·73	2,466	53·07	1,328	29·98
5	Lalpur	..	R	9,103	19·12	6,844	28·23	2,259	9·67
			U	2,167	39·87	1,405	50·30	762	28·84
6	Jamjodhpur	..	R	13,820	21·66	10,005	30·70	3,815	12·23
			U	5,643	40·90	3,604	50·97	2,039	30·31
7	Okhamandal	..	R	3,148	14·63	2,392	21·69	756	7·21
			U	15,410	39·43	10,171	49·38	5,239	28·34
8	Kalyanpur	..	R	8,947	12·08	6,993	19·75	1,954	5·83
			U	..	..	..	..	..	..
9	Khambhalia	..	R	6,856	12·90	5,387	19·98	1,469	5·61
			U	9,469	32·84	6,196	42·65	3,273	22·88
10	Bhanvad	..	R	7,766	16·59	5,890	24·48	1,876	8·24
			U	4,941	41·80	3,088	52·06	1,853	31·46

Source :

District Census Handbook 1961, Jamnagar, p. 18

Literacy in the urban areas is quite pronounced, while the rural areas and females as usual lag behind. In the rural areas the highest percentage of male literacy was in Jodiya taluka (27·16 per cent), and the lowest in Kalyanpur taluka (19·75 per cent). The highest female literacy was in Jamjodhpur taluka (12·23 per cent), and the lowest in Khambhalia taluka (5·61 per cent). In urban areas literacy was the highest in Jamnagar (45·06 per cent) and the lowest in Khambhalia taluka (32·84 per cent), Dhrol, however, had the highest percentage of urban male literates (56·29 per cent), the lowest being 42·65 per cent in Khambhalia taluka. Jamnagar taluka has the highest percentage of urban female literates (32·89 per cent), the lowest for Khambhalia taluka being 22·88. The percentage of literates to total population by age and sex for the rural and urban areas is as follows.

STATEMENT XIV.2

Literacy by Age Groups, 1961

Age-groups	Total			Rural			Urban		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10
All-ages	26·55	36·38	16·24	17·90	26·94	8·55	42·30	53·21	30·54
5-14	32·16	39·97	23·63	23·58	32·41	13·96	48·25	54·10	41·82
15-34	36·89	50·26	22·72	24·81	37·40	11·87	56·84	70·62	41·43
35-59	27·91	42·06	12·90	17·41	29·02	5·43	46·63	64·46	26·77
60+	15·94	30·06	4·88	9·70	19·42	1·65	20·60	56·01	11·43
Age not stated	12·41	12·94	11·46	14·53	16·67	10·34	8·5	5·36	13·16

Source : *District Census Handbook* 1961, Jamnagar, p·17

The highest literacy was recorded in the age-group 15-34 both in the rural as well as urban areas. Literacy was also the highest among males of this age-group. But among females it was the highest in the school-going ages 5-14. Literates among children in the age-group 5-14 constitute 32·16 per cent of whom males account for 39·97 per cent and females 23·63 per cent.

The overall percentage of literacy in the district is 26·55 per cent which in other words signifies that more than 73 per cent of the population in the district is illiterate.

Educational Standards—Educational standards and the number of persons who had attained these standards in the rural and urban areas of the district according to the 1961 Census are given below by sex.

STATEMENT XIV.3

Educational Standards in Urban and Rural Areas, 1961

Sl. No.	Educational levels	Urban			Rural		
		Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8
	Total	**293,658**	**152,377**	**141,281**	**534,761**	**271,923**	**262,838**
1	Illiterate	169,426	71,294	98,132	439,024	198,654	240,370
2	Literate (without educational level) ..	39,746	25,699	14,047	51,528	39,588	11,940
3	Primary or Junior Basic	74,257	46,707	27,550	43,371	32,877	10,494
4	Matriculation or Higher Secondary ..	8,350	7,020	1,330	838	804	34
5	Technical diploma not equal to degree ..	165	160	5	..	..	..
6	Non technical diploma not equal to degree ..	16	16	..	..	..	..
7	University degree or post-graduate degree other than technical degree ..	957	799	158	..	..	..
8	Technical degree or diploma equal to degree or post-graduate degree	741	682	59	..	..	..
	(i) Engineering ..	167	167	..	..	..	..
	(ii) Medicine ..	187	161	26	..	..	..
	(iii) Agriculture ..	7	7	..	..	..	..
	(iv) Veterinary and dairying ..	2	2	..	..	..	..
	(v) Technology ..	18	18	..	..	..	..
	(vi) Teaching ..	57	46	11	..	..	..
	(vii) Others ..	303	281	22	..	..	..

Source : *District Census Handbook* 1961, Jamnagar, pp. 23-24

The level of literacy in the rural areas as compared to the urban is low. 57·70 per cent of the urban population is found to be illiterates, as against 82·10 in the rural areas revealing greater facilities for education in towns than in villages. During the past decade the district has also made much headway in the field of university education which has returned 957 persons with university degrees in the district. All the higher education

is confined to towns as there is not a single person in the countryside whose education has advanced beyond the secondary stage. Persons who have obtained technical degree or diploma equal to degree or post-graduate degree are only 22·6 per cent less than those who have taken university or post-graduate degree in non-technical branches. Great demand for technical education in recent times is evident from those figures. Among the technical courses. 'Engineering' and 'Medicine' are the two branches which are generally preferred. Female students are naturally attracted to medicine but not to 'Engineering' which does not claim a single woman in this branch of technical instruction. Teaching is another branch of studies opted by women.

SPREAD OF EDUCATION AMONG WOMEN—The education of girls and women did not progress much in pre-Independence days. In the initial stages, girls studied with boys in schools and so their number was very small. There was no separate school for them till 1933-34, when the first girls' school in the district, viz., Ma Shri Sajuba Saheb Lady Willingdon Girls' High School was opened in Jamnagar followed by a number of girls' schools thereafter. At the time of its integration in 1948, there were for girls 10 primary schools, and 2 secondary schools in the Nawanagar State. In keeping with the Constitution of India, female education was given due importance by the Governments of Saurashtra and Gujarat, as a result of which the number of girls' schools, as well as the number of girl students increased rapidly. In 1965-66 the district had 11 high schools and 55 primary schools for girls. The number of females in primary schools shows a corresponding rise from 16,332 in 1956-57 to 38,942 in 1965-66.

SPREAD OF EDUCATION AMONG BACKWARD CLASSES AND TRIBES—Literacy and education among Scheduled Castes and Scheduled Tribes for the urban and rural areas as returned by the 1961 Census are given below.

	Total population of Scheduled Castes and Scheduled Tribes			Literates and educated Persons			Illiterate Persons		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1	2	3	4	5	6	7	8	9	10
Total	**50.295**	**25.057**	**25.238**	**5,596**	**5.133**	**463**	**44.699**	**19.924**	**24,775**
Rural	35,171	17,632	17,539	3,185	2,966	219	31,986	14.666	17,320
Urban	15,124	7,425	7,699	2,411	2,167	244	12,713	5,259	7,456

Source :

District Census Handbook 1961, Jamnagar

These figures reveal a low level of literacy among the Scheduled Castes and Scheduled Tribes. The level of literacy among those living in rural areas was very low. Their women-folk are mostly illiterates, as only 463 females out of a total of 25,238 females were returned as literates.

Percentage of literacy and educational standards in rural and urban areas given in the following table reveal a wide gap between the general population on the one hand and Scheduled Castes and Scheduled Tribes on the other.

Educational Standards of General Population and Scheduled Castes and Scheduled Tribes, 1961

Educational levels	Rural			Urban		
	Per cent of general population	Per cent of Scheduled Castes population	Per cent of Scheduled Tribes population	Per cent of general population	Per cent of Scheduled Castes population	Per cent of Scheduled Tribes population
1	2	3	4	5	6	7
Total ..	**100 00**	**100 00**	**100·00**	**100·00**	**100·00**	**100·00**
Illiterate .	82·09	97·63	90·94	57·70	81 27	84·06
Literate (without educational level) ..	9·64	01·74	05·53	13·53	09·49	07·71
Primary or Junior Basic..	8·11	00·63	03·51	25·28	9·24	07·99
Matriculation and above ..	00·16	..	00·02	3·49	..	00·24

Source :

1. Census of India 1961, Vol. V, Gujarat, Part II-C, *Cultural and Migration Tables*
2. Census of India 1961, Vol. V, Gujarat, Part V-A, *Tables on Scheduled Castes and Scheduled Tribes*

Scheduled Castes and Scheduled Tribes who were suffering from various handicaps in the past have now begun to realise the need and importance of educating their children. Though the level of literacy and education is still much lower than that prevailing in the general population, the liberal assistance offered by Government through a number of schemes have helped appreciably the promotion of education among them. As is to be expected the level of educational attainment in the urban areas is comparatively higher than in the rural.

General Education—Pre-primary classes of the Balmandir school pattern are conducted at certain places in the district. The Jamnagar Balmandir is the oldest established in the year 1932. It was run by Shri Jamnagar Balmandir Committee till 1958, when the Vidyottejak Mandal, Jamnagar, took over its administration. There are eight other Balmandirs in the city, four of which are run by the Jamnagar Municipality. All the taluka headquarters and towns of the district have Balmandirs now. Their total number in the district was 26 in the year 1965-66.

PRIMARY EDUCATION—Primary education had made good progress in the former princely areas of the district as it had been made free in the Nawanagar State since 1911 and in the Dhrol State since 1914. The total number of recognised primary schools in the Nawanagar State in 1942-43 was 268 of which 235 were for boys and 33 for girls. The total number of students studying in them was 23,235. Besides these there were 7 schools for Harijans with 236 pupils, and 6 Madressas for Mohammedan girls, mostly imparting religious instruction and maintained by private funds. In the Dhrol State the total number of primary schools during the same year was 20 of which 17 were for boys and 3 for girls. The total number of pupils studying in them was 1,465.

Soon after the formation of the State of Saurashtra in 1948, the question of the expansion of primary education engaged the attention of Government. The provision of free and compulsory primary education to the children of the district, as enjoined by the Constitution of India gave a great impetus to this policy. A large number of schools was rapidly opened in the Peninsula. By 1951 the number of primary schools in the district went up to 312 and that of pupils to 25,274. Primary education registered a remarkable growth between 1951-61 at the end of which period the number of schools increased to 739 and that of pupils to 71,756. In 1953-54, the Government launched an intensive drive to provide schools to as many schoolless villages as possible and adopted the policy of opening a school in every village with a population of 500 and over As a result of this campaign, the total number of villages in the district without school in 1960-61 was only 82. Thus towards the end of the last decade, 88·30 per cent of the villages in the district were provided with facilities of primary education, and there was a primary school for every 6·11 sq. miles on an average in the district. Jodiya taluka was the first to have a primary school in each of its 52 villages.

Free and Compulsory Primary Education—This district forms part of the Saurashtra region where the Saurashtra Primary Education Act, 1956 was made applicable. This Act provided for compulsion within the jurisdiction of municipalities and gram panchayats. Provision for the expansion of facilities in respect of imparting free and compulsory education to children aged 6-11 was, however, made in the Third Five Year Plan. Compulsory primary education was introduced in the district in the age group 7-8 during the year 1961-62, and in the age group 8-9 during the year 1962-63.

The extent of headway made in the field of primary education in the district is already evident from statement given earlier, showing the break-up of the number of primary schools and pupils studying in them. Though it is not possible to compare exactly the progress made in education prior to 1960-61 with that after it on account of territorial changes made in the district from time to time, it is clear, that a uniform progress in the expansion of

number of institutions and pupils has taken place. Likewise there has been an increase in the number of teachers engaged in these institutions. The number of institution rose from 278 in 1950-51 to 739 in 1960-61 and to 792 in 1965-66, while the number of pupils increased from 49,492 to 71,756 and to 106,101 during the same period with a corresponding rise in the number of teachers engaged in these schools from 2,339 in 1960-61 to 3,080 in 1965-66.

Training Facilities for Primary School Teachers—In view of the expansion of primary education, it was found necessary to expand training facilities for teachers to improve the quality of teaching in the primary and basic schools. There were four primary training colleges in the district in 1965 of which one was meant for women teachers only.

The following statement shows the progress of training institutions for primary teachers during the years 1961, 1965 and 1967.

Primary Teachers Training Institutions and Pupil-teachers Studying in them, 1961-67

Year	No. of primary training institutions	No. of pupil-teachers
1	2	3
1961 ..	2	120
1965 ..	4	498
1967 ..	5	677

Source :

Educational Inspector, Jamnagar

The number of institutions has increased from 2 in 1961 to 5 in 1967, and that of pupil-teachers from 120 to 677.

Condensed Course for Adult Women—A condensed course for adult women, for preparing them for the Primary School Certificate Examination is conducted at Alinbada near Jamnagar. It is two years' course sponsored by the Central Social Welfare Board, New Delhi. Most of the 60 women who had passed the test during 1964-65 and 1965-66 have been employed as primary teachers.

School Buildings—Allied to the problem of trained teachers was the problem of providing buildings to house the increasing number of pupils in the village schools. The intensified programme of construction of buildings for the primary schools was initiated during the last two years of the First Plan and continued in the Second and Third Plan periods with remarkable success as seen from the fact that from 435 in 1957, the number of school buildings increased to 693 in 1961 and to 741 in 1965.

BASIC SCHOOLS—The new ideology of basic education has influenced the educational activities of the district which have been continuously expanding. The period from 1955 onwards has been a period of relatively rapid extension of basic education. The Assessment Committee of the Government of India on Basic Education recommended what is known as the 'Orientation of Primary Schools towards the Basic Pattern'. Under this programme, most of the non-basic schools have been oriented towards basic pattern by introducing community activities and simple crafts like spinning, weaving, kitchen gardening, agriculture, etc. The idea underlying the basic education is that education must centre round some form of manual productive work. Children should not learn merely from books, but should also learn some simple craft so as to inculcate in them a sense of self-reliance, responsibility, initiative, enterprise, and resourcefulness. Productive work is made the basis of learning. The scheme of basic education is implemented in two stages, viz., the junior basic schools from class I to IV and the senior basic schools from class V to VII The district had 330 senior basic and 175 junior basic schools in the year 1965.

LOKSHALAS—*Lokshalas* are a novel feature of the educational set-up of the district. They are a special kind of basic schools of the residential type, where children also learn some simple useful crafts. *Lokshalas* have made a notable contribution towards furthering the cause of basic education. Their main objective is (a) to cultivate useful work habits and study, and (b) to impart education through the three 'H's (head, hand and heart). *Lokshalas* are of two types (i) junior, and (ii) senior. A junior *lokshala* is conceived as a residential basic school with agriculture as a main craft, while a senior lokshala is a post-basic residential school with agriculture and dairy as main crafts. The senior *lokshala* is expected to provide secondary education adapted to the needs of the village environment. There are in all 6 *lokshalas* in the district, viz..

(i) Satya Kabir Sr. Lokshala, Kansumara

(ii) Samana Sr. Lokshala, Samana

(iii) Baid Jr. Lokshala, Baid

(iv) Tarsai Jr. Lokshala, Tarsai

(v) Banugar Jr. Lokshala, Banugar

(vi) Gangajala Jr. Lokshala, Gangajala

The first *lokshala* was started in 1949, when Mahant Shri Shantidasji of the Satya Kabir Panth donated about 40 acres of land, and a *pucca*

building for it. The *lokshala* imparts secondary education through the village crafts like agriculture, animal husbandry, and dairying. There were 60 students studying in the *lokshala* in 1966-67. Another *lokshala* established at Samana in 1961 imparts secondary education through village crafts.

SECONDARY EDUCATION—Secondary education has undergone various changes in the past. The old high schools prior to the formation of the United State of Saurashtra were mostly run by the respective State Governments and prepared students for the matriculation examination. With the establishment of the Secondary Schools Certificate Board in 1949, Secondary School Certificate Examinations began to be held from that year instead of matriculation. The Gujarat Secondary School Examination Board constituted for the State, after the formation of Gujarat State in May, 1960, now conducts these examinations. The first high school in the State of Nawanagar called the Jamnagar State High School was established in Jamnagar in 1877. Subsequently, schools imparting secondary education were opened at other places in the State. The first high school in Jodiya was established in 1891 and in Khambhalia in 1930. With the passage of time the number of schools went on increasing. The total number of middle schools and high schools in Nawanagar State in 1942-43 was 31. Of these, 4 were high schools and 27 middle schools. Dhrol State had one middle school in that year. The number of secondary schools and the students studying in them in 1950-51 and 1955-56 in the district as constituted then and in 1960-61 and 1965-66 given earlier in statement shows a considerable increase in these institutions which have risen from 16 in 1950-51 to 53 in 1960-61 and to 59 in 1965-66. The number of students has also increased from 5,516 in 1950-51 to 11,045 in 1960-61 and to 15,373 in 1965-66. To meet the shortage of trained teachers required for improving the quality of teaching, a training college for secondary teachers has been established at Aliabada in 1965 with 37 pupil-teachers on the roll.

Reorientation in Education—The need for introducing changes in the existing system of education has been responsible for its reorientation in recent times. Multipurposes schools providing training courses in crafts, technical, commerce and other subjects have been opened. There are at present 8 such schools in the district with a total number of 6,810 students and a teaching staff of 234.

HIGHER EDUCATION—The former Indian States that now form part of the district had not established any institution for higher education in their respective areas. But they helped the poor and deserving students for prosecuting higher studies in various courses by awarding scholarships and other incentives. The first college in the district was started in 1953 at Aliabada, and a medical college was opened at Jamnagar in 1955. In 1966, there were in all six colleges in the district. Of these, two were arts colleges, one commerce

and law college, one Ayurved college, one B. Ed. college and one medical college. A brief description of each of them is given in the following paragraphs.

Darbar Gopaldas Mahavidyalaya (Aliabada)—The Darbar Gopaldas Mahavidyalaya was the first college established in 1953 in Jamnagar district for bringing university education to the doors of the villagers. It conducted classes up to B. A. till 1965 when it was closed due to lack of sufficient number of students. The hostel attached to the Mahavidyalaya laid emphasis on manual labour as an important feature of hostel life. The college opened the B Ed. section in June, 1963 for imparting professional training to graduate teachers from all over Gujarat. The College had 37 students in 1965-66. M. Ed classes in the college have also been recently started.

Doshi Kalidas Virji Arts and Science College, Jamnagar—Started by the Government of Saurashtra in Jamnagar in June, 1956, the college is housed in its own building constructed by Government This is the only college in the city conducting graduate and post-graduate courses in arts and science subjects. The total strength of students studying in the college in 1965-66 was 1,087.

Shardapith Arts College, Dwarka—This college was established in April, 1960 by the Shardapith Vidyasabha, Dwarka and is managed by the Okhamandal College Administration Committee. It conducts courses for the B. A. degree. The number of students in the college in 1966 was 85. It is housed in a rented government building. Its library contains about 3,000 books. The college hostel can accommodate 50 students.

PROFESSIONAL AND TECHNICAL EDUCATION—The importance of professional and technical education in a developing economy aiming at doing away with the existing imbalance between agricultural and non-agricultural pursuits cannot but be under-estimated. Such an education is essential and useful in a number of ways. It trains candidates in the technical know-how of various specialised avocations, and helps increase the quantity and improvement in quality of goods produced. Professional and technical education makes education more meaningful and purposeful in the present day economy which is getting more and more complex day by day owing to the diversification of industries and professions and paves the way for an allround economic progress.

Shri Meghji Pethraj Shah Medical College, Jamnagar—The students of Saurashtra region experienced great difficulties in the past in prosecuting studies in medicine in the absence of a medical college in the peninsula. On the formation of Saurashtra State the number of hospitals and dispensaries was increasing at a very rapid rate and the question of manning them with

qualified persons also posed a great problem to the Government. Even though the Government had announced liberal scholarships to students desiring to prosecute their studies in this branch of science, dearth of trained personnel continued unabated. Realising these handicaps, late Shri Meghji Pethraj Shah, a philanthropist of Jamnagar, offered to donate a sum of Rs. 15 lakhs for the establishment of a medical college at Jamnagar. The Government of Saurashtra appointed a committee of eminent doctors and engineers which visited different medical colleges and prepared a plan for the starting of a medical college at Jamnagar. The site was chosen in the campus of the Irwin Hospital, which was to be attached to the proposed medical college. The construction work which was started in 1955 was completed in 1959. The college occupies an area of 1·55 lakh sq. feet and has 3 floors. The Dean of the college is the controlling authority and administrative head of both the institutions.

The medical college conducts besides degree courses, post-graduate courses in M. D. and M. S. Departments of Anatomy, Pharmacology, Preventive and Social Medicine, Surgery, Medicine and Pathology and Bacteriology are the departments of the college where research work is carried out. A target of admitting 100 students to the college was laid down by the former Saurashtra Government. The number of seats was later increased to 120 and further to 150 in 1967. Two hostels with kitchen and dining hall were completed in 1961. The college library possesses a number of books on medical science and subscribes to important journals bearing on the subjects of medicine, surgery, etc. A centre for training laboratory technicians was also added to the college during the Second Five Year Plan.

In view of the imporant position Ayurved holds in this region a number of institutions are functioning in Jamnagar for promoting studies and research in the indigenous system of medicine. These are :

AYURVED

Institute for Ayurvedic Studies and Research, Jamnagar—The Institute was started in 1963 as an outcome of the integration of three important Ayurvedic institutions located in Jamnagar, viz., (1) Central Institute of Research in Indigenous System of Medicine, (2) Post-graduate Training Centre in Ayurved, and (3) Shri Gulabkunvarba Ayurved Mahavidyalaya. It is an unique institution in the whole of India conducting under-graduate and post-graduate training in Ayurved with a separate research section. The Institute receives by way of grant-in-aid Rs. 8 lakhs per annum from the Union Government, and Rs. 3 lakhs per annum from the State Government.

In pursuance of the recommendations of the Central Council of Health held at Mahabaleshwar in 1962 the Central Shuddha Ayurvedic Education

Committee was set up by the Government of India. The syllabus prepared by this Committee for Ayurvedic education was accepted in 1963 by the Central Council of Health and implemented in this Institute. The academic activities of the Institute are at present spread over the teaching and research sections.

(1) *Teaching Section*—The Institute conducts several courses like the (a) post-graduate courses in Ayurved, (b) under-graduate courses in Ayurved, and (c) refresher courses for teachers and *vaidyas*. The details about these courses are as follows.

(a) *Post-graduate Course*—Students from all over India and also from Nepal and Ceylon come for higher studies in Ayurved. Successful candidates are awarded a certificate of " Higher Proficiency in Ayurved " (H. P. A.) which is recognised by the Government of India and other State Governments. The total number of students who have taken this degree between 1956 and 1965 was 223. Thesis so far written by the students on various aspects of Ayurved number 223.

(b) *Under-graduate Course*—At first an integrated course leading to the B. A M. S. degree was taught as an under-graduate course in one of the amalgamated institutions of the Institute, viz., Shri Gulabkunvarba Ayurved Mahavidyalaya, affiliated to the Gujarat University. A total of 105 successful candidates have taken the B. A. M. S. degree from this institution since October, 1960 to April, 1966. Government of Gujarat, however, decided to discontinue this course and constituted the State Faculty of Ayurvedic and Unani Systems of Medicine in 1960 to advise it on the nature of courses and other matters. But this faculty was closed consequent upon the establishment of the Ayurved University at Jamnagar in 1966 when it was decided that a *shuddha* Ayurved course should be instituted. The duration of the course is 4½ years, and students passing at least the S. S. C. examination are admitted to these courses. The total number of students who have taken up studies in the new course was 282 in June, 1966.

(c) *Refresher Course*—The Institute also conducts since 1960 refresher courses, for teachers as well as practising *vaidyas* The duration of these courses are of 1½ to 3 months. 102 teachers and *vaidyas* have taken advantage of this scheme till 1965-66.

(2) *Research Section*—The research section of the Institute is organised in three sections, viz., (a) Modern Team, (b) Ayurvedic Team, and (c) *Siddha* Team. All the three teams take independent problems for study and conduct research on them. They also co-operate on problems like dietics, pharmacology, therapeutics, and pharmaceutical and fundamental principles studied at the Institute. As a result of experience gained in the past, technique and working procedure have been devised for the collection of details regarding history,

signs, symptoms, diagnosis, comparative study, treatment, etc. The results arrived at are put to test by laboratory investigations.

Gujarat Ayurved University, Jamnagar—With a view to achieve further progress in Ayurved, the Government of Gujarat appointed the Gujarat Ayurved University Committee in February, 1964, to consider question of establishing a separate university for study and research in Ayurved. On the recommendations of this Committee, the Gujarat Ayurved University was inaugurated at Jamnagar in January, 1967 to develop *shuddha* Ayurvedic system of medicine and conduct and co-ordinate research undertaken at various centres in the State. The city of Jamnagar which has done so much for the revival of Ayurved in the past can rightly pride in being the seat of a separate and full-fledged university for the development of Ayurved in the country. All the Ayurvedic colleges in the State have been affiliated to this University. A provision has also been made in the Gujarat Ayurved University Act to grant affiliations even to Ayurvedic colleges situated outside the State. There are at present 11 colleges in Gujarat imparting education in Ayurved, affiliated to this Universiy. Of these, 4 are run by the Government and the rest by private bodies. Inspection of these colleges have been carried out and suggestions made for their improvement. An Implementation Commitee appointed for the purpose varifies whether suggestions made by the Inspection Committee have been implemented.

The Senate, Syndicate and other bodies of this University have now been constituted as provided in the Act. A committee formed for the assessment and development of research and post-graduate teaching in Ayurved conducted at Jamnagar since 1954 has visited various institutions in the country. A committee for the conduct examinations has also been appointed and measures to up-grade their standard taken. The Gujarat Ayurved University aims at putting the post-graduate teaching in Ayurved on a very sound basis so as to produce good practitioners, devoted teachers and secure through them the development of Ayurved.

TECHNICAL EDUCATION—Before the advent of mechanisation of industries, there was hardly any need of institutions for technical and professional education For, such training as was then required in the economic structure of the time was imparted through a system of apprenticeship which trained an individual in the technique of production handed down from father to son. With the adoption of modern and mechanised means of production, the need for imparting professional and technical education was keenly felt. Such facilities during pre-Independence days were very meagre. Systematic attempts were, therefore, required to achieve the goal of planned economic development by making increasing provision for scientific and technological studies and research in the successive Five Year Plans of the country to meet the growing demand for professionally and

technically qualified personnel. The most important among such institutions started in the district of Jamnagar are noted below.

(i) Gandhi Udyog Mandir,

(ii) Industrial Training Institute,

(iii) Nawanagar High School at Jamnagar, and

(iv) D. C. C. High School at Sikka.

The Gandhi Udyog Mandir established in 1955 aims at promoting the welfare of the Backward Classes by giving them technical education and industrial training. The courses conducted by the institution are (1) carpentry, (2) dyeing, and (3) sewing. On an average about 30 students receive training in the institution every year. Students are provided free lodging and boarding facilities. After completion of studies, students become qualified to appear in technical examinations conducted by the Director of Technical Education, Government of Gujarat. The Udyog Mandir is under the control of the Gujarat State Backward Classes Welfare Department.

The Industrial Training Institute was established at Jamnagar in 1957 under the Craftsmen Training Scheme sponsored by the Government of India. It is run by the Directorate of Technical Education, Government of Gujarat, and conducts courses for (1) blacksmiths, (2) carpenters, (3) draughtsmen (civil), (4) draughtsmen (mechanical), (5) electricians, (6) fitters, (7) motor mechanics, (8) machinists, (9) surveyors, (10) instrument mechanics, (11) sheet metal workers, (12) turners, (13) welders, and (14) wiremen.

The number of students studying in the institution was 230 in 1966-67.

Technical courses in the Nawanagar High School, Jamnagar were introduced in 1956 for Standard VIII to XI leading to the S. S. C. E. (Tech.). The D. C. C. High School, Sikka, also started in the same year one division in the upper classes for technical education in geometrical and mechanical drawing, workshop technology, elements of mechanical and electrical engineering, etc., along with other general and academic subjects.

Sainik School, Balachadi—Sainik School, Balachadi, is a residential school for boys, providing public school education with a military bias. It is an all-India school with an all-India curriculum, selection and examination. It was first established at Jamnagar in July, 1961. Four years later it was shifted to Balachadi about 28 km. from Jamnagar. The administration of the school is vested in an autonomus Board of Governors under the chairmanship of the Union Minister of Defence. The Chief Minister and

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the *Education Minister of Gujarat State* are members of the Board of Governors.

The School is primarily intended to be a feeder institution to the National Defence Academy, Khadakvasla, where future officers of Armed Forces receive their initial training. Its object is to prepare boys academically and physically for entry into the National Defence Academy or other walks of life. Character, team-spirit, dedication of purpose, patriotic outlook, and desire to serve the country with efficiency are the qualities sought to be promoted by the Sainik School. The school prepares students for the Union Public Service Commission Examination for admission to the National Defence Academy. In addition to this it also prepares boys for (a) Indian School Service Examination or Higher Secondary Certificate Examination and (b) Secondary School Certificate Examination of Gujarat. Admission to the school is normally confined to boys between the ages of 9 and 10 years. If vacancies exist in higher standards, older boys may also be admitted. Admission is given on the result of an all-India entrance examination which consists of intelligence test, a *viva voce* test, and written tests in general knowledge, arithmetic, etc. Students between the age of 9-13, who qualify at the entrance examination are entitled to the Gujarat State scholarship, if their parents' income is less than Rs. 12,000 per annum. The scholarship holders are required to join the National Defence Academy, if selected. Those who are not selected are free to follow career of their own choice, after leaving the school. In 1965, 7 students from this school had entered the National Defence Academy. The school at present has a capacity of 350 students in Classes V to XI A number of seats are reserved for the sons of defence service personnel and ex-service personnel. All the students are accommodated in what are known as 'houses', each house accommodating about 50 boys. At present the school has five such houses. Proper medical attention is given and monthly check-up is made of the general health of the students. All students are expected to take part in co-curricular activities to develop creative faculties and skill in fine arts and crafts. Educational tours to places of historical importance are arranged during vacations. The school provides facilities for major games like cricket, tennis, football, and hockey, besides indoor games like table-tennis, carrom, chess, etc. Horse-riding forms a special feature of the school curriculum.

Co-operative Training School—There was a Co-operative Training Centre run under the control of the Gujarat State Co-operative Union, Ahmedabad, but it has ceased functioning from 1964.

COURSES IN COMMERCE—Courses in commerce subjects have been gaining importance day by day and are provided in the curriculum of the secondary schools. Commercial schools and institutions are also started to teach commercial subjects which usually extend over four years beginning

from Standard VIII in secondary schools. Besides heavy initial expenditure on equipment, difficulty in getting the services of full time trained instructors for conducting these courses is keenly felt. And the number of students offering such subjects has not been quite encouraging. Inspite of these handicaps, such courses are becoming popular day by day. The number of secondary schools teaching commercial subjects was 4 and that of other commercial schools and institutions 5 in 1966-67.

Shri Meghji Pethraj Shah Municipal College of Commerce and Law— The college was started in June, 1961 with a donation of Rs. 177,000 by Sheth Meghji Pethraj. It is managed by Shri Vidyottejak Mandal of Jamnagar and has its own building. The college runs classes leading up to the degrees of B.Com. and LL.B. It has a good library with a total collection of 5,200 books. In 1966, the total number of students on the roll was 743.

EDUCATIONAL SOCIETIES

Promotion of education in the past, was considered to be the sole responsibility of the State. The public at large remained totally unconcerned in the matter when the British appeared on the scene. Private societies undertaking educational activities were few and far between. After independence, conditions began to change, and public spirited and enthusiastic persons formed education societies to promote the cause of education. An account of some of the important education societies is given below.

(1) *Shri Vidya Mandal, Aliya-Bada*—Situated in village Aliya, it was established in 1952 with a view to organise and promote educational activities in the district. It is managed by a Board of Trustees. It initiated its first activity by starting a high school in March, 1953 which has now been converted into a multi-purpose high school with science and agriculture as special subjects. In June of the same year, the Mandal started the Darbar Gopaldas Mahavidyalaya. The arts section of the college which was closed in 1965 due to lack of sufficient number of students conducted classes up to the B. A., standard. The Teachers' Training section was opened in the college in 1963-64. In 1965-66, 37 graduate passed out from the college. Three other institutions, namely, the Krishi Vidyalaya (Agriculture School), Primary Teacher's Training College and the school for training Panchayat Secretaries were started by the Mandal in 1955. The Vidya Mandal Farm and Shri Gangajala Farm established subsequently conduct experiments in agricultural development. A pre-primary school started in 1956 had 43 students on the roll in 1965-66. The Mandal also runs a co-operative store, a ladies' hostel and an Ayurvedic dispensary.

(2) *Shri Vidyottejak Mandal, Jamnagar*—Shri Vidyottejak Mandal was established at Jamnagar in 1953 with the objects of intensifying and

popularising educational activities in Jamnagar and other places, and to make people education-minded. The Society has been responsible for establishing a net-work of educational institutions ranging from the primary to the collegiate level. It is managed by a Board of Trustees. It conducts the following institutions in Jamnagar city.

Institutions run by Shri Vidyottejak Mandal, Jamnagar

Sl. No.	Name of institutions	When established	Nature of institutions	No. of students on the roll in 1966-67
1	2	3	4	5
1	M. P. Shah Municipal Commerce and Law College	1961	College	723
2	D. C. C. Multipurpose High School	1956	Multipurpose High School	678
3	Municipal High School ..	1965	High School	510
4	K. N. Kumar Mandir ..	1955	Primary School	499
5	Prathmik Shala (Primary School)	1959	"	140
6	Jamnagar Balmandir	1932	Balmandir	174
7	V. D. Baradanwala Balmandir ..	1957	"	142
8	M. V. Shah Balmandir	1960	"	174
9	Municipal Bal Adhyapan Mandir..	1965	"	118

(3) *Jamnagar Education Society, Jamnagar*—The Society was established in 1950 with a view to provide educational facilities in Jamnagar district. It runs a high school, viz., the National Multipurpose High School, which was started in 1953 with only 7 students. It prepares students for the S. S. C. Examination with special subjects like commerce, music, drawing, etc. The school had 962 students on its roll in 1966-67. The Society also conducts extra classes for Government Commercial Diploma.

(4) *Hindi Samaj, Jamnagar*—The Samaj was established in 1956 for propagating Hindi and providing educational facilities in Hindi. Shishu Vihar Hindi High School is the only school with Hindi as the medium of instruction in Saurashtra. The school had 427 students on its roll in 1967.

(5) *The Shardapith Vidyasabha, Dwarka*—The Shardapith Vidyasabha was established in 1960 by Jagatguru Shri Shankaracharya of Shardapith, Dwarka. The aim of the Vidyasabha is to establish and maintain cultural institutions in Dwarka and other places which come under the preceptorship of Shri Shankaracharya. It runs the Shardapith College at Dwarka, and the Dwarkadhish Sanskrit Academy and Institute for Research in Indology, and classes in Sanskrit.

The Vidyasabha also organises occasional lectures of learned scholars in Sanskrit. It maintains a rich library of old and rare manuscripts and printed classical books on Indian culture and philosophy.

Jagatguru Shankaracharya of Shardapith, Dwarka is the founder president of the Vidyasabha.

(6) *Shri Mithapur Nutan Balshikshan Sangh, Mithapur*—The Sangh was established in 1951 with the object of providing facilities for multiple development of children. It started a Balmandir in 1951, a Balwadi in 1959, an Anganwadi in 1961 and a Kumarmandir in 1959. The total number of children in these institutions was 542 in 1966-67.

SCHOOLS FOR MUSIC

A number of institutions conducting music and dance programmes are in existence in the district. Important among theme are:

(1) *Kala Niketan, Jamnagar*—Established in 1962, it arranges and organises (1) music programmes, (2) Hindi, Gujarati and Sanskrit Dramas, (3) lectures on religion, (4) Kavi Sammelans, etc.

(2) *Kashi Vishwanath Sangit Vidyalay, Jamnagar*—Gita Ramayan classes are conducted in the Kashi Vishwanath temple at Jamnagar. Music classes are also conducted in the temple by a trained music teacher who coaches students and prepares them for various music examinations.

(3) *Natraj Sahkari Kala Mandir, Jamnagar*—Established in 1957, it imparts training in dramatics. It has so far organised 12 dramas that have earned popular esteem.

(4) *Nritya Bharati, Jamnagar*—It is the only institution in Jamnagar which conducts classes in oriental type of dancing. The institute arranges dance shows every year at various places in the country.

(5) *Manorajan Kala Mandir, Mithapur*—It organises music, dance and drama programmes.

ORIENTAL SCHOOLS AND COLLEGES

Sanskrit—Oriental schools engaged in imparting instruction in Sanskrit were encouraged by the Nawanagar State. During the year 1943-44, there were 8 *pathshalas* in the State, only three of which exist today. These are (i) Rajkiya Sanskrit Pathshala, Jamnagar, (ii) Anandabava Vedant Sanskrit Pathshala. Jamnagar and (iii) Bhimji Ramji Sanskrit Pathshala at Khambhalia.

Rajkiya Sanskrit Pathshala is the oldest existing *pathshala* in the district established as early as 1870 A. D. It is a recognised centre for Sanskrit examinations held annually by the Sanskrit Association, Calcutta, and the

Government Sanskrit College, Varanasi. Anandabava Vedant Sanskrit Pathshala of Jamnagar was established in 1937 by the Anandabava Seva Sanstha, Jamnagar. The third *pathshala* is at Khambhalia. It is named after Bhimji Ramji, its founder.

The Dwarkadhish Sanskrit Academy and Institute for Sanskrit Studies and Research in Indology was established in 1960 at Dwarka by the Shardapith Vidyasabha. Besides conducting research work it also prepares students for the Ph. D. degree in Sanskrit for which 9 students were on the roll in 1966-67. The Institute was recognised by the Gujarat University and now by the Saurashtra University. Classes in Sanskrit are also conducted for coaching students by the *shastriya* method.

Studies in Arabic—A Madressa for imparting instructions in Arabic was established in Jamnagar in 1962. In 1967 the number of students studying in it was 96 and that of staff 8.

EDUCATION FOR THE PHYSICALLY HANDICAPPED—There is no school for the physically handicapped persons in the district. A school for the blind was opened in 1961-62, but was closed a year later. Welfare of the physically handicapped has now become one of the main activity of the Directorate of Social Welfare. Attempts are being made to train the physically handicapped persons and to enable them to stand on their own legs. They may be equally made useful to society by giving them proper education and training.

ADULT LITERACY, SOCIAL EDUCATION AND MEASURES FOR DIFFUSSION OF CULTURE AMONG THE MASSES—The work of social education in the district began only after Independence. It is carried on mostly on a voluntary basis. The extent of headway made in social education will be evident from the following statement which gives a break-up of the number of social education classes and adults made literate in the years 1950-51, 1955-56, 1961-62 and 1965-66.

Sl. No.	Year	Number of social education classes	Number of adults made literate
1	2	3	4
1	1950-51	32	714
2	1956-57	159	3,200
3	1961-62	119	1,460
4	1965-66	99	1,574

Source :

1. District Social Education Organiser, Rajkot
2. Administrative Officer, District Panchayat, Jamnagar

The tempo generated during the initial period of 1956-57 seems to have declined in subsequent years.

EDUCATIONAL FACILITIES FOR BACKWARD CLASS STUDENTS

At first the Scheduled Castes students were not admitted to public schools. A special committee was constituted by the Nawanagar State for the educational development of Scheduled Castes. The Committee made special efforts to get their children admitted to schools. Teachers in those schools which admitted Scheduled Castes students were given additional pay of Rs. 10 to 15 per month, besides financial assistance for the purchase of books and stationery articles to such students by way of encouragement. Much progress in the matter could not, however, be made, under the conditions existing at that time. After the integration of the Princely States, the former Government of Saurashtra took various steps to promote education among Harijans. Government constituted a statutory board, viz., the Saurashtra Backward Classes Board which implemented many schemes during the First Five Year Plan period for the spread of education among Backward Classes. These schemes were continued during the Second and Third Plan periods also. They were freely admitted to public schools and colleges and also exempted from payment of fees. Liberal grants-in-aid to the extent of 50 per cent of the expenditure incurred were made available to hostels providing facilities to Backward Classes students. "As a further inducement to mixing, an extra 10 per cent grant was given to Harijan hostels admitting 10 per cent of the caste Hindus and *vice versa*."[1] Other schemes for the welfare of Scheduled Castes, Scheduled Tribes and ex-criminal tribes implemented by the Saurashtra Backward Classes Board included establishment of education centres, culture centres, and residential schools. By the end of the Third Plan period this district had 10 *Samskar Kendras* for Scheduled Castes, 3 for ex-criminal tribes and 1 for Scheduled Tribes. The Government of Saurashtra also gave grant-in-aid to the Backward Classes Board for the construction of buildings for Harijan hostels. This scheme was continued in the composite State of Bombay and is now in operation in Gujarat State. There were two Backward Classes hostels for Scheduled Castes, one residential school for Scheduled Tribes and one production-*cum*-tailoring centre for Scheduled Castes in the district in 1966-67. A brief description of some of the main educational schemes designed to promote education among Backward Classes is given below.

CONCESSION IN FEES, ETC.

(a) *Primary Education*

Primary education is free to all. Moreover, scholarships are offered to Backward Classes students at various rates.

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1. VAKIL and LAKDAWALA, *Economic Survey of Saurashtra*, p. 371, 1953

(b) *Secondary Education*

All Backward Classes pupils receiving secondary education were exempted from paying tuition fees till 1962-63. But thereafter the Government of Gujarat has introduced an income limit. Under the revised scheme, Backward Classes students studying in Government schools, the annual income of whose guardians does not exceed Rs. 3,600 are exempted from the payment of tuition fees. Those whose annual income is above Rs. 3,600 but less than Rs. 4,800 are charged half the tuition fees. Such students are given examination fees for appearing in the S. S. C. and other statutory examinations. The State Government also awards scholarships on merit-*cum*-poverty basis to Backward Classes students.

(c) *Higher Education*

Under the Government of India scheme for the award of scholarships for post S. S. C. Examination studies to the Backward Classes students, scholarships are awarded by the State Directorate of Social Welfare to eligible students for prosecuting post-Secondary School Certificate Examination studies. The amount of scholarship varies from Rs. 27 to 75 per month per student according to the subjects taken (Arts, Science, Medical, Engineering, etc.) their attendance, and also whether they are staying in hostels or are day scholars. The scheme is being administered by the State Government since 1959-60.

With a view to facilitate the admission of Backward Classes students to various courses in institutions and in hostels attached to them, Government have reserved certain percentage of seats for them.

Over and above these educational concessions, the voluntary agencies conducting Backward Classes hostels are granted financial assistance. There are three hostels for the students of Backward Classes in the district, viz.,

(i) Shri Meghji Pethraj Sarvajanik Kumar Chhatralaya, Khambhalia,
(ii) Sarvajanik Kanya Chhatralaya, Jamnagar,
(iii) Aliya-Bada Kumar Chhatralaya, Aliya-Bada.

Financial assistance towards tuition and examination fees and scholarships amounting to Rs. 8,247 was given to 57 Scheduled Castes students during the Second Plan period. During the Third Plan period, this concession amounted to Rs. 10,557 towards tuition fees to 199 students, and Rs. 38,445 towards scholarships to 967 students. The Directorate of Technical Education runs an Industrial Training Centre at Jamnagar where free education is imparted to students of Backward Classes. A Backward Classes student receiving education in this institution is paid Rs. 25 per month by way of scholarship.

Culture is the heritage assiduously cultivated and built up by a people through ages. It *embodies their aspirations and achievements and represents* as well the moral, material and spiritual values of life that make the life of the individual and the community fuller and richer. Culture thus evolved is reflected in the mode of living, approach to the problems of life and the various cultural activities in the field of literature, scientific research, and fine arts. It permeates every stratum of society and consciously and unconsciously regulates their behaviour in every walk of life.

Culture as it developed in this country has shown two distinct trends. One that influenced the upper stratum of society was highly philosophical and intellectual in character. It was the culture of the intelligentsia. Another trend which ran concurrently influenced and moulded the life of the common man. Both worked alike, influenced each other and achieved the same purpose. Religion being the motive power of all human activities, be it in the field of literature or arts all cultural activities centred round the deities the people adored.

Jamnagar being on the way to Dwarka, one of the four *dhamas* or centres of pilgrimage sacred to the Hindus, both these places have for centuries been visited by the devout, the *sadhus*, and *sanyasis* from all parts of India. The fact that one was the capital of the rulers of a princely State and the other a holy place associated with Lord Krishna has exercised great influence on the people of this region. This partly accounts for the growth and development of Jamnagar as a city of temples which has earned for it the name of *Chhoti Kashi* or smaller Banaras. Besides Hindu temples, many of which are quite old and dedicated to almost all the known deities of the Hindu pantheon, Jamnagar is known also for its Jain temples and mosques, which are fine specimens of architectural beauty.

LITERARY ACTIVITIES—Literary activities which developed at the outset in this part of country consisted mainly of bardic literature and folk-lore on the one hand and some written literature on the other. The folk-lore was the monopoly of bards known as Bhat, Charan, Barot, Gadhavi, etc., who used to commit to heart and narrate semi-historical or imaginary stories of love, valour, chivalry, sacrifice and heroism. Parts of such stories were pithily condensed in couplets or *doohas* and *sorthas*, while longer narratives were composed in bardic prosody. Written literature comprised either original works in Gujarati or Hindi, or translations from Sanskrit or commentaries thereon. Various forms of literary and cultural activities in Jamnagar district *will now be reviewed below in brief.*

Charani Literature—All literary activities in the initial stages were restricted to poetry and devotional songs, as well as to the panegyric of the patron rulers. The literature that developed in the early stages was in

Charani style. A number of eminent Charan poets flourished at the court of Nawanagar. Jam Raval, the founder of Jamnagar, was a patron of poets. Of the many Charan poets at his court the best and the greatest was Isardan, who because of his piety, truthfulness and godly qualities, later on came to be known as Isara Parmesara. Hailing from Marwar, Isardan in his early youth settled in Jamnagar. As legend has it, being rudely shocked into consciousness by Pitambar Joshi, a renowned and revered minister of Jam Raval, he decided never to waste his extraordinary poetic talent on ordinary mortals, not even on his patron the great Jam, but dedicated it to the glory of God the Almighty. He innovated the *Renaki chhand*, a Charani metre, and composed *Deviyan* and *Hari-Ras*, the latter known as the Charani Upanishad, which he carried in a magnificent procession to Dwarka and offered at the feet of Lord Krishna, the Dwarkadhish. Barot Vajmal Parbatji popularly known as Vaja Meru was a Charan poet of note who flourished in the region of Jam Ranmal. He composed *Vibha Vilas* which was published by the Jamnagar State in 1893 A. D. Shamji Kavi and Bhimaji Ratnu were the chief court poets of Jam Vibhaji. Shamji had composed *Anyokti Vilas* in Hindi, which was translated into Gujarati by his son Keshavlal who also was a poet. Kesarbhai, Jivabhai, Mavalji, Keshavlal and Mavdanji were the poets patronised by Jam Ranjitsinhji. Mavdanji who is the most distinguished among them is an author of several books including *Yadu Vansha Prakash, Brahma Samhita, Brahma Vilas*, etc., in Charani metres, besides *Kavi Kirtanavali* and *Draupadi Vastra Haran* in Hindi. His knowledge of Charani literature is profound.

SAINT POETS—Modern literary trends made their appearance about the beginning of the 19th century. Poetry written in the early stages was essentially religious and took the form of devotional songs, *bhajans* and *kirtans*. Swami Nishkulanand and Swami Bhoomananda, the celebrated poet saints of the Swaminarayan sect hailed from Jamnagar. Nishkulananda, Lalji Suthar, a carpenter of Shekhpat village before he took holy orders, was an author of some 20 books. His *padas* of *vairagya* or renunciation have for a long time been a treasure of Gujarati poetry. Bhoomananda Swami was Rupji Ramji, a mason of Kesiya village before he became a Sadhu, whose *bhajans* have become a part of the literary heritage of this region.

SHASTRIS—The rulers of Nawanagar patronised *shastris* who were equally well-versed in Ayurved, the science of life. The Shastris of Jamnagar, known throughout the country for their learning and scholarsbip have contributed in no small measure to the intellectual and cultural development of Jamnagar. Keshavji Shastri was a noted Sanskrit scholar, who studies for over twelve years the various Shastras at Kashi and fought and won many Pandits in *Shastrartha*. Kalidas Govindji Shastri translated *Shrimad-Bhagawat* and Tulasi Krita *Ramayana*; Vishvanath Govindji, the *Bhoja Prabandha*; and Harilal Kalidas, the *Bhagawadgeeta*.

Mahamahopadhyaya Hathibhai Harishanker Shastri was an excellent speaker and his recitation of Sanskrit verses was simply wonderful. Besides translating *Panchadashi* and some of the Sanskrit plays of Shastri Shankarlal Maheshvar, he wrote a commentary on *Krishna Chandrabhyudayam* and gave for many years public discourses on the *Ramayana* and the *Mahabharata*. Pandit Fatehchand Karpoorchand Lalan also from Jamnagar was a great orator who delivered philosophical lectures in America and England. He wrote mostly on Jain thought and philosophy. His *Sadvakta* is the first book in Gujarati on the art of oratory. Vaidyashastri Manishankar Govindji wrote historical and mythological stories, besides *Mukta*, a novel in the style of Bana's *Kadambari*, and *Gujarati Granthakaro ane Grantho*, an introduction to Gujarati men of letters and their works. He translated the *Bhagawad-Geeta* along with the *Madhusudan Teeka* and the *Manu Smriti*, with his own commentary on the latter. He wrote two medical treatises, *Chikitsabdhi*, and *Aryanarya Aushadh*; and published *Ayurved Marga Darshika* a medical journal. His colleague Shastri Gokuldas Ramakrishna was a profound scholar of Sanskrit and Ayurved and a poet, noted for the sweetness of his diction. Manishankar Vithalji, a brother of the great exponent of Ayurved, Zandu Bhattji was an author of many books on Ayurved *Rasatantra* and an editor of the *Rasesha Vidya Vijnana*, a medical bi-monthly.

Durgashankar Kevalram Shastri, was a versatile scholar with a strict scientific approach. He was keenly interested in literature, music, painting, art and architecture, history, mythology, Indology, botany, medicine, etc. His lectures on *Bharatiya Samskaro-tenun Gujaratiman Avataran* delivered in the Thakkar Vasanji Madhavji Lecture Series of the Bombay University bear testimony to his depth of knowledge, originality of outlook, independence of spirit and objectivity of approach. His contribution on the medieval history and culture of Gujarat, namely, *Gujarat-no Purvamadhya Kalin Itihas* and his works on the Shaivism, Vaishnavism, and Kabir sect are also noteworthy. He was an editor of the Ayurved Vijnana, a medical monthly for many years.

Modern Gujarati literature also had its votaries at Jamnagar in a number of men of letters who, as will be seen presently have made outstanding contribution to the enrichment of Gujarati prose and poetry, novels, short stories, journalism, philosophy, religion and scientific research. But many of them had to choose a broader field outside, as Jamnagar was too small a field for the cultivation and development of their literary talent.

Himatlal Ganeshji Anjaria had contributed to the formation and development of taste of a whole generation of lovers of poetry in Gujarat by his *Kavyamadhurya* and *Kavita Pravesha*. He introduced Gujarati literature to lay readers by his *Sahitya Praveshika* and *Sahitya Prarambhika* and published books on education.

Dolarrai Rangildas Mankad, (b. 1902), the first Vice-Chancellor of the Saurashtra University, is a noted scholar of Sanskrit, aesthetics drama and Indology. Besides the Ranjitram Gold Medal by Gujarati Vidyasabha in 1936, he has been awarded the National Academy Award of Rs. 5,000 for the year 1964 for the collection of his articles, *Naivedya*. He has delivered five lectures on *Gujarati Kavyaprakaro* in the Thakkar Vasanji Madhavji Lecture series under the auspices of the Bombay University. His work in the field of historical research and literary criticism is equally valuable.

Dr. Pranjivandas Mehta, himself an eminent physician and surgeon, is largely responsible for editing the monumental work, *Charaka Samhita*, published by the Gulabkunvarba Ayurvedic Society, Jamnagar as also for some of the important research work in Ayurved.

Venilal Chhaganlal Buch (1899-1944), for many years the printer and publisher of Gandhiji's *Navjeevan*, translated a considerable portion of Jawaharlal Nehru's *Glimpses of the World History* and published it as *Tavarikhni Tejachhaya*.

Vallabhdas Bhagwanji Ganatra wrote in lucid Sanskrit the *Satyagraha Geeta* and the *Megha Sandesha*, describing Gandhiji's march to Dandi.

Jayantilal Sundarji Oza has written some lovely stories, plays and pen-pictures for children ; and dealt with various aspects of child psychology and education.

Prof. Mansukhlal Maganlal Jhaveri (b. 1907) a noted poet, and literary critic, has published over 30 books including collections of his poems, studies and critical articles, translations of *Abhijnana Shakuntalam* from Sanskrit, Shakespeare's *Hamlet* and *Othello* and Jawaharlal Nehru's *India To-day and Tomorrow* from English, a grammar of Gujarati language, and a history of Gujarati literature. He was an official delegate at the 34th P. E. N. Inter National Congress held at New York in June 1966. His poems have appeared in *Poetry* (Chicago) and the *Indiske Digte* (Copenhagen).

Harjivan Somaiya (1908-1942) wrote about 20 books, some original, and some translations from English and Marathi. His original novels include *Dariya-na-Mamla* and *Bhar Dariye*, stories of seafaring adventures ; and *Punaragamana* in two parts. He was a linguist, and an editor of the *Urmi ane Nava Rachana* for some years.

Purushottam Vishram Mavji born in village Varvala near Dwarka, though a businessman and industrialist, had high literary and artistic tastes and was a leading member of the Royal Asiatic Society of Bombay. His personal collection of pieces of historical and artistic interest was very rich and unique.

He was the editor of the *Suvarnamala*, the first and the only magazine *delux*, dedicated to Arts. He wrote 18 books including *Sursagarni Sundari*, *Shivaji-no Vaghanakh*, and *Shivaji-nun Swarajya*, novels in Gujarati. He also wrote in Marathi and English.

Kalyanrai Nathubhai Joshi, a noted educationist of Dwarka, and a student of archaeology and science, has written books on education, history, geography, geology, physics, physiology and hygiene, and also edited *Kelavuni*, an educational monthly published from Baroda.

Sundarji Gokaldas Betai (b. 1905) born in Beyt, Dwarka, is a noted poet of the Gandhian era. Betai's poetry is noted for its seriousness, restraint and chastity of diction; and his criticism, for its insight and understanding. His *Tulasidal* is awarded the Narmad Suvarna Chandraka and *Visheshanjali* and *Suvarnamegha* have won prizes from the State Government.

DRAMA—That dramatic art was not neglected in this region will be seen from the formation of a number of dramatic companies that came into being from time to time in Jamnagar and Dwarka.

Arya Prabodh Natak Mandali was started in Jamnagar about 1885 by Durlabh Shyam Dhruva, who also wrote a number of dramas. Another dramatic company, Hind Natak Samaj, was started in 1919 by Shankarlal Manishankar Joshi, who was both a director and producer. He closed this company in 1924, but started another in 1930 and called it Ranjit Natak Samaj. One of its plays, *Kadu Makrani* was quite a rage for some time. Jayashankar Waghji Vyas was a writer of dramas who wrote *Visha Veli*, *Noor Jahan* and *Bheeshma*, popular in those days.

FILMS—In modern times when cinemas took the place of drama, Jamnagar has produced one of the pioneers of the film industry in India, Chandulal Shah who started the Ranjit Film Co. in 1929. The company has produced about 250 pictures, including *Tansen*, *Soordas*, etc.

MUSIC—The court of Jamnagar does not seem to have patronised music in any special way. But the Acharyas of the Vaishnava Haveli did what the State did not. Goswami Vrajlalji, who flourished during the regime of Jam Ranmalji, invited Adityaram, one of the greatest musicians of the day, to Jamnagar. Adityaram was both a vocalist and an instrumentalist. He was a good Mridanga player of Kathiawar. He started a music school in Jamnagar and wrote a book named *Sangit Aditya* on music. Master Vasant, Mir Isa and Mir Umar who also made their mark as musicians hailed from Jamnagar.

In recent times, a number of institutions conducting music and dance classes has come into existence in the district.

PAINTING—The series of paintings depicting the scenes of the battle of Bhucharmori, paintings about many *puranik* episodes, portraits of the Jams from Jam Raval to Jam Sataji II and hunting scenes painted on the ceiling of a hall in Lakhota, represent the Jamnagar School of painting. Mistri Dama Ganga, Rupa Kachara, Nathu Kaba and Hirjibhai are known for their murals and portrait paintings. Jamnagar has produced some of the best-known photo-artists who have developed photography as an art. Their pictures have won approbation in Exhibitions held in India and abroad.

Jam Ranjitsinhji, a great connoisseur of art, had collected a number of master pieces from abroad which adorn his private gallery.

SPORTS—Jam Ranjitsinhji, himself a legendary wizard in the cricket world of his time, naturally made Jamnagar a nursery for geniuses in cricket. Cricketers of provincial or national stature like Oghadshankar, Uday Merchant, Ramji, Dulip, Amarsinh, Vijay Merchant, Vinoo Mankad, Salim Durani and the up-and-coming Ashok Mankad are Jamnagar's gift to cricket. The present Jam Shatrushalysinhji is also a good cricketer.

PERIODICALS—Apart from the medical periodicals and the *Lohana Abhyudaya* referred to above, *Dahapan*, a monthly edited by Velji Lalji Vora, was published round about 1920 at Jamnagar. 'Ankush', another monthly edited by Shankarlal Manishankar Joshi, started publication a little later. It went on for six years. *Samaj Sevak*, a monthly edited by Gokaldas Hirji Thakkar came to be published in about 1925. The *Dahapan* and the *Ankush* catered for the general readership, were free from sensationalism and provided healthy reading. The *Samaj Sevak*, published during the period of socio-political and cultural awakening at Gandhiji's arrival on the Indian Scene, evinced a sort of missionary zeal for social reform.

The number of cultural and literary periodicals published in 1966-67 in the district was seven, of which one was a weekly, one fortnightly, three monthlies, one quarterly, and one bi-annual.

Particulars of these periodicals are given below.

Sl. No.	Classification in Gujarati	Name
1	2	3
1	Weekly	*Lokbandhu*
2	Fortnightly	*Market Review*
3	Monthly	*Pranami Dharm Patrika*
4	Monthly	*Parajiva Prakash*
5	Monthly	*Shri Navbharti*
6	Quarterly	*Ayurved Lok*
7	Bi-annual	*Shardapith Pradipa*

LIBRARIES AND MUSEUM

LIBRARIES

Library movement is an important activity that reflects both the state of education of the people, and also helps in promoting it. The first library in the district, as at present constituted, was established in Dwarka in 1871 by the Assistant Resident of Okhamandal. Maharaja Sayajirao III, ruler of the former Baroda State, had started a library campaign in his territories, which included the present Okhamandal, from 1906. The first reading room and library in Jamnagar was started in 1921. As literacy increased, more libraries were started, and their number began to increase. The following were the 13 libraries in the district in 1966. Of these, five are in Jamnagar city

1. District Library, Jamnagar
2. Shri Badri Free Reading Room and Library, Jamnagar
3. Shri Dayaram Free Reading Room and Library, Jamnagar
4. Shri Jain Pustakalaya, Jamnagar
5. Jawahar Bal Pustakalaya, Jamnagar
6. Shri M. M. and R. S. Library, Jodiya
7. Mahatma Gandhi Municipal Library, Kalavad
8. Gram Panchayat Library, Lalpur
9. Nagar Panchayat Library, Jamjodhpur
10. Sarvajanik Library, Dwarka
11. Shri Chhatrapati Sarvajanik Library, Okha
12. Sheth G. D. M. Sarvajanik Library, Beyt
13. Juvansinhji Library and Museum, Jamnagar

The important among these are described below.

District Library, Jamnagar—In pursuance of the scheme for starting a district library at each of the district headquarters initiated by the Government of Saurashtra, this library started functioning from October, 1956. It

has a separate reading section which is attended by about 250 persons everyday and a special section for children. It had a special circulating library which has been separated from it after the inauguration of Panchayati Raj in 1963, and put under the control of the District Panchayat. The library had a collection of 34,650 books in 1966, classified broadly as follows; Gujarati 21,486, English 3,126, Hindi 9,600 and Sanskrit 438. The total membership during that year was 1,350. The number of daily newspapers, and other periodicals received by the library was 85.

Badri Free Reading Room and Sarvajanik Library—This library was established at Jamnagar in 1949 and registered as Sarvajanik Library in the year 1961. It had a total membership of 182, and a total collection of 1,663 books in 1965-66. It has a reading room section which is visited by about 150 readers everyday.

Dayaram Free Reading Room and Library, Jamnagar—This library is an old library of Jamnagar city, established in 1921. The reading section of the library is attended by about 250 persons daily. It has a special separate section for women and children. The library had a collection of 19,455 books in different languages, viz., Gujarati, English and Hindi in 1967. The number of daily newspapers, periodicals and magazines received by the library was 109 in 1967. Its total membership in 1966-67 was 366. The library is housed in its own spacious building.

Shri Jain Library and Reading Room, Jamnagar—Managed by Shri Jain Sevak Mandal of Jamnagar the library was established in 1931. It had a total membership of 100 in 1965-66. The library had during the same year a collection of 3,300 books all of which are in Gujarati. A small reading section is also attached to the library. The number of daily newspapers and periodicals subscribed by the library was 31. It is housed in its own building.

Nagar Panchayat Library, Jamjodhpur The library was started in 1956 and is now managed by the Jamjodhpur Nagar Panchayat. It had a total membership of 336 and a total collection of 2,648 books in the year 1965-66

Shri Dwarka Sarvajanik Library, Dwarka—Situated in Dwarka town, it is one of the oldest leading libraries in Saurashtra and the oldest existing library in the district. It was started in the year 1871. The number of daily newspapers and periodicals received by the library was 36 in 1965-66. It has a large collection of books in different languages and on different subjects like literature, philosophy, religion, science, biography, etc. The library had during the same year a collection of 11,615 books classified broadly as follows Gujarati 6,834, English 2,786, Hindi 640, Marathi 799, Sanskrit 523 and Urdu 33. It had a total membership of 194 in 1965-66. The library is housed

in its own spacious building having a big compound in which are also situated two other libraries, namely, Shri Motibai Sarvajanik Mahila Library and Shri Damodar Devkunvar Bal Library. Shri Motibai Sarvajanik Mahila library is exclusively for ladies, and has a collection of about 2,000 books. Shri Damodar Devkunvar Bal Pustakalay is for children and has a collection of about 4,000 books.

Shri Chhatrapati Sarvajanik Library, Okha—The library was started in Okha in 1928. In 1965-66, it had a collection of 3,579 books of which 1,674 were Gujarati, 137 Hindi, 608 Marathi and 1,160 English. During the same year, it had a total membership of 160. The reading section is visited by about 70 persons everyday. The library is housed in its own building.

MUSEUM

There is one museum of historical and archaeological interest at Jamnagar where a collection of antiquarian interest is exhibited. It was originally established in 1946 by the State of Nawanagar, and continued on the formation of the Government of Saurashtra in 1948, and now by the Government of Gujarat. The museum contains 400 specimens classified into a number of sections described below.

(i) *Sculptures Gallery*—The sculptures in this section have been mainly collected from important sites of old Nawanagar State.

(ii) *Epigraphy Section*—It contains stone inscriptions, copper plates, etc. Some of them are Jain inscriptions of the 13th century.

(iii) *Paintings*—This section contains Rajput paintings of the 18th century depicting episodes from *Shiv Purana.* There is also series of paintings depicting the battle of Bhuchar Mori fought in 1591 on the walls of one of the halls, in the museum housed in the Lakhota palace.

(iv) *Numismatic Section*—This section contains coins of the Kshatrapas, Guptas, Moghals and local kings and seals of the Kshatrapa period.

(v) *Natural History Section*—It is a small section consisting of stuffed animals.

(vi) *Pre-History Section*—In this section are exhibited excavated articles like potsherds, conch, bangles, polished *red* ware, etc.

Library—The museum has a small reference library containing books on literature, history, culture, art, architecture and archaeology. It has

also a manuscript section in which manuscripts dating back to 16th century are kept. About 25,000 persons visit the museum every year.

Juvansinhji Library and Museum, Jamnagar—Mention may also be made of the Juvansinhji Library and Museum originally started in 1941, for the Gulabkunvarba Ayurvedic Society, Jamnagar. It was handed over to the Gulabkunvarba Ayurvedic College when the Gulabkunvarba Ayurvedic Society started an under-graduate college in 1946. With the formation of the Institution for Ayurvedic studies and Research in 1963, the libraries of the Gulabkunvarba Ayurvedic College, Central Institute of Research in Indigenous Systems of Medicine and the Post-graduate Training Centre were all amalgamated into one Central Library of the Institute for Ayurvedic Studies and Research, Jamnagar. The library contains 15,000 books in different Indian languages on Ayurved and modern scientific treatment besides some rare manuscripts.

CHAPTER XV

MEDICAL AND PUBLIC HEALTH SERVICES

HEALTH AND MEDICAL FACILITIES IN THE PAST

Prior to the introduction of modern allopathic system of medicine, Ayurved, the indigenous system of medicine, was in vogue in this part of the country. The Unani system which the Muslims brought with them to India does not seem to have become popular in this region. Many eminent practitioners of the Ayurvedic system, viz., *vaidyas* and *shastris* served the local chiefs who patronised them, besides the common man who also resorted to the indigenous system of medicine for treatment. Ayurved, the science of life, aims at permanently curing rather than suppressing the disease. That Ayurved resorted to surgery as well is amply borne out by the various treatises on the subject. This system has held a high place in Jamnagar, because of the patronage it received from the State. During the plauge which appeared in the early part of the 18th century, a *Rajvaidyas* of Nawanagar is said to have successfully brought that epidemic under control. Jamnagar has produced *vaidyas*. known not only within the boundaries of the State but also outside.

In the past minor ailments were treated by roots, herbs and drugs kept in every household. Use of tree leaves and other plants was most common. People consulted *vaidyas* only when they could not control the ailment by themselves. Living a simple life free from the worries and tension of modern life and working in open fields gave them certain immunity from diseases to which the present day society is exposed. But the toll of life was indeed heavy when fatal diseases like plague, small-pox and cholera appeared in virulent form in the absence of medicines the modern science provides. People in the lower strata, however, depended much upon deities, whose intervention they sought in each and every matter affecting their well being. Ignorant and superstitious, such calamities as failure of crops or spread of epidemics like cholera, small-pox, etc., were attributed to the evil influence or wrath of some deity or evil spirit. Small wonder, that they had recourse to witch-doctors and sorcerers who were supposed to possess antidotes and *mantras* for propitiating the spirits. Barbers and itinerant priests were also resorted to freely to cure diseases.

With the advent of the British in India, western system of medicine or allopathy gained increasing popularity with the people due to the scientific nature of the treatment and quick relief it provided. People gradually lost faith in Ayurved and the number of *vaidyas* well-versed in it declined.

Nawanagar State also came under the influence of modern trends and took measures for providing allopathic treatment to its subjects. The Jubilee Hospital established at Jamnagar in 1891 laid the foundation of the hospital organisation which, by the middle of this century, expanded into an institution equipped with all modern facilities of scientific treatment.

Ayurved also received equal encouragement from the rulers of Nawanagar State. Shri Gulabkunvarba Ayurvedic Society was established to conduct research and promote studies in this ancient system of medicine, the details of which appear in the pages that follow. With the expansion of various activities in the sphere of Ayurved, Jamnagar has become today *the seat of a full-fledged University of Ayurved, the only one of its kind in the country.*

PRE-INTEGRATION PERIOD

Nawanagar State--Kathiawar Gazetteer mentions that in the year 1882 out of fifty-six hospitals and dispensaries in the Kathiawar peninsula, Halar Prant had nineteen hospitals and dispensaries which rose to 29 by 1942-43. The State had its own medical department with Chief Medical Officer as its head. The dispensary at Khambhalia was converted into a hospital in 1912 following the receipt of a donation from Sheth Gopalji Valji and was named "Bai Monghibai Hospital", Khambhalia. An X-ray Plant was installed in the Jubilee Hospital at Jamnagar in 1930. The total number of beds in the hospitals in Nawanagar State in 1927-28 was 100, of which the Jubilee Hospital contained 80 beds and the hospitals at Khambhalia and Jodiya had twelve and eight beds respectively.

With a view to provide modern facilities of medical care and treatment to the people of his State, the late Jam Ranjitsinhji constructed a hospital called Irwin Hospital in 1934 at a cost of Rs. 6 lakhs. Impressed by the therapeutic utility of revolving Solarium, he also built a Solarium at Jamnagar in 1933 to treat tuberculosis, skin diseases, malaria, etc. The Ranjit Nursing Association, affiliated to the Bombay Presidency Nursing Association and attached to the Irwin Group of Hospitals, was started from November, 1933 for training nurses. Nawanagar State was equally alive to the problems of child welfare to tackle which it established in 1936-37 a Maternity and Child Welfare Society to train midwives and to inspect the mother and the child on receipt of the report of birth. In the same year Tejiba Maternity and Infant Welfare Hall and Digvijaysinhji Sanatorium were also built. In 1942-43 a new maternity theatre with modern equipments was built at a cost of Rs. 75,000.

The State had also introduced the system of visits to rural areas by the Medical Officer and the staff including vaccinators for administering medical

relief to the rural population. With a view to control the spread of epidemics like small-pox and to make the work of vaccination speedier, the State was divided into 10 circles, each under a vaccinator. Two relieving vaccinators were also kept to meet emergencies. Accommodation of beds in the hospitals was simultaneously increased from 100 in 1926-27 to 266 in 1942-43. The total expenditure incurred by the State for providing medical relief *pari pasu* increased from Rs. 95,000 in 1922-23 to Rs. 259,000 in 1942-43.

Dhrol State—The State of Dhrol, which had a separate existence till 1948 had, as early as 1905, established the Victoria Diamond Jubilee Dispensary, which was converted in 1938 into a 12 bedded hospital called Dolatsinhji Hospital, Dhrol.

Medical facilities available on the eve of integration are shown below

Name of the State	No. of Hospitals	No. of Dispensaries	Population served by (in 000's)		Area served by (in sq. miles)	
			Hospitals	Dispensaries	Hospitals	Dispensaries
1	2	3	4	5	6	7
Nawanagar ..	3	32	101	17	758	126
Dhrol ..	1	4	34	9	288	71

Source :

Memorandum presented to the Part B States (Special Assistance), Enquiry Committee, p. 95, 1953

POST-INDEPENDENCE PERIOD—On the integration of princely area into the United State of Saurashtra, the entire administrative machinery was overhauled and placed on a uniform basis and measures for providing extensive medical relief initiated. A separate Public Health Department was created in 1948. The Inspector General of Hospitals and Prisons was appointed the Director of Health Services in 1949. The functions of the Medical Department and Public Health Deparmtent were integrated under the general direction and control of the Director of Health Services. The hospitals and dispensaries were divided respectively into two and four categories. The Chief Medical Officer who acted as the administrative head and inspecting officer for all hospitals and dispensaries in the district was in charge of the hospital at the district headquarters. Government of Saurashtra had also created a separate Directorate of Ayurved from 1952-53 which looked after Ayurvedic institutions in the State

A survey of medical facilities in Saurashtra was carried out. Hospitals were fitted with modern and up to date equipments like X-ray machines, pathological laboratories, refrigerators, ultra-violet rays, oxygen apparatuses, shadow-free lamps, etc. Mosquito curtains were supplied to hospitals in the malaria affected areas. Anti-rabic centres were also started at all hospitals and dispensaries where electricity was available. The vast problem of bringing medical relief within the reach of the remotest villages was thus

tackled on priority basis. Villages which did not have either a hospital or a dispensary within a radius of ten miles were provided with Ayurvedic medicinal chests. With the expansion of medical facilities, the necessity of having more and more qualified doctors including specialists was keenly felt. To meet this deficiency, Shri M. P. Shah Medical College was started at Jamnagar in 1955. Dearth of trained nurses and midwives was met by the Government of Saurashtra by starting nursing schools, one each at Jamnagar and Bhavnagar during the First Plan period.

Government also strengthened the health organisation by taking concerted measures for promoting public health in the district. Various measures undertaken include a health survey conducted by Government, spraying of D. D. T., in areas affected by malaria, B. C. G. vaccination and vaccination to check small-pox and cholera and strengthening the collection of vital statistics. High rate of mortality among the women of child bearing ages and infants was sought to be tackled by establishing maternity and child welfare centres in rural and urban areas. The urban centres provided ante-natal and post-natal care of the mother and medical treatment of the children. In rural areas the centres examined outdoor patients, conducted medical examination of school children and also vaccinated people against small-pox, cholera, etc. A maternity and child health division was organised and skimmed milk powder received as gift from the UNICEF distributed among children below 12 years and nursing and expectant mothers. All these activities were continued in the bilingual Bombay State and have been further expanded after bifurcation.

VITAL STATISTICS

The data on vital statistics, i. e., births and deaths available being incomplete and defective are useful only for drawing general conclusions. The following statement illustrates births, deaths and infant mortality registered in the district during 1959-1965.

Births, Deaths and Infant Mortality in the District, 1959-65

Year 1		No. of births registered 2	No. of deaths registered 3	No. of deaths of infants registered 4
1959	..	16,997	6,691	1,688
1961	..	14,503	5,269	1,123
1963	..	16,358	7,055	1,419
1965	..	21,441	8,478	2,013

Source :

1. Bureau of Economics and Statistics, *Handbook of Basic Statistics*, Gujarat State, 1963 and 1964, pp. 130-35
2. Directorate of Health and Medical Services, Ahmedabad

The statement reveals that the number of births registered increased in 1965 as compared to those in the year 1959 and rose by 34·66 per cent. Increase in the total number of deaths as also in the number of infant deaths registered is comparatively less and found to be 26·70 and 19·25 per cent respectively.

General trend of birth-rate, death-rate and natural increase in population from 1959 to 1965 is illustrated below.

Year 1		Birth-rate per thousand 2	Death-rate per thousand 3	Natural increase in population 4	Death-rate for infants per thousand live births 5
1959	.	23.0	9.6	13.4	106
1961	..	17.4	6.3	11.1	77
1963	..	17.5	8.0	9.5	92
1965	..	23.3	9.2	14.1	94

Source :

1. Bureau of Economics and Statistics, *Handbook of Basic Statistics*, 1963 and 1964, for years 1959, 1961 and 1963, pp. 133-35
2. Directorate of Health and Medical Services, for the year 1965

These statistics disclose an appreciable increase in the rate of survival. This may be attributed to the expansion in medical and public health facilities and consequent improvement in the general health of the people after Independence.

Common Diseases—Some idea about the diseases common in the district can be had from the statistics that follow.

Diseases and Deaths, 1965

Sl. No. 1	Cause of death 2	No. of deaths 3	Sl. No. 1	Cause of death 2	No. of deaths 3
1	Cholera .	6	7	Suicide	25
2	Small-pox	9	8	Wounding or accident	170
3	Plague	.	9	Wild beasts	..
4	Fevers	2,867	10	Snake bite	26
5	Dysentery and Diarrhoea	336	11	Rabies . ..	6
6	Respiratory Diseases ..	426	12	All other causes .	4,596
				Total . .	8,467

Source :
Directorate of Health and Medical Services, Ahmedabad

Exclusive of 'all other causes' (4,596), deaths due to fevers under which most of the diseases go were the most common and claimed by far the largest number of lives (2,867) in the district in 1965. Other diseases commonly reported were those of the respiratory system, dysentery and diarrhoea, jointly accounting for 762 lives. Wounding or accident, snake bite and suicide claimed 170, 26 and 25 deaths respectively. Whereas plague has totally disappeared, diseases like small-pox and cholera have been completely brought under control, as a result of various preventive measures taken by the Government to combat them. These will be described later while dealing with public health programmes.

HOSPITALS AND DISPENSARIES—On the eve of the formation of Gujarat State in 1960, Jamnagar district had hospitals at Jamnagar, Khambhalia, Dhrol and Dwarka, of which the Irwin Group of Hospitals at Jamnagar had 504 beds in 1965 and is equipped with all modern facilities. On account of reorganisation of districts in 1959, Okhamandal taluka was merged into Jamnagar district as a result of which Dwarka Civil Hospital was added to the existing strength of hospitals in that district. Attached to the Irwin Group of Hospitals are T. B. and Mental Hospitals having respectively 100 and 50 beds. In 1965 the hospital at Khambhalia was upgraded into a Referral Hospital with corresponding increase in the number of beds to 52. The following are the Hospitals and dispensaries run by the Government in Jamnagar district.

Sl. No	Hospitals	Sl. No.	Dispensaries
1	2	3	4
1	Irwin Group of Hospitals, Jamnagar	1	Refugee Dispensary, Jamnagar
2	T. B. and Chest Diseases Hospital, Jamnagar	2	Bedi Dispensary, Jamnagar
3	Mental Hospital, Jamnagar	3	Dabasang Dispensary, Dabasang
4	Referral Hospital, Khambhalia	4	Raval Dispensary, Raval
5	Dolatsinhji Hospital, Dhrol	5	Okha Dispensary, Okha
6	Civil Hospital, Dwarka	6	Beyt Dispensary, Beyt
		7	Lalpur Dispensary, Lalpur
		8	Jamjodhpur Dispensary, Jamjodhpur
		9	Jodiya Dispensary, Jodiya

Organisational Set-up—The Director of Health and Medical Services is the head of all medical and health institutions in the State and is responsible for the efficient working of all such institutions in the State. The Directorate is divided into two sections—Medical and Health. On the medical side, the Director is assisted by a Deputy Director of Medical Services under whom are various sections dealing with medical colleges, hospitals, nursing schools, mental hospitals, cancer hospital, opthalmic institute, etc. On the health side there is a Deputy Director of Public Health at the headquarters, to

look after all the activities of the Department except Family Planning and Malaria-Filaria Programmes. He is assisted by the functional Assistant Directors of Public Health in charge of different health programmes, implemented by the Public Health Department through the District Health Officers, in charge of all public health activities in the district. There is also a Joint Director of Public Health Services at the headquarters in charge of all activities connected with the Family Planning Programme and Maternal and Child Health Services in the State implemented through the District Family Planning Officers at the district level. There is also a full-time Deputy Director of Public Health in charge of Malaria-Filaria eradication schemes at the headquarters of the State. He functions through the Regional Malaria Officers and Unit Officers at the district level. Formerly the Civil Surgeon was in charge of hospitals and dispensaries in the district and the District Health Officer was in charge of health institutions. According to the existing set-up all the dispensaries including the Ayurvedic dispensaries were transferred to the District Panchayat and placed them in charge of the District Health Officer on the introduction of Panchayati Raj from 1st April, 1963. The set-up in Jamnagar district is, however, slightly different as with the starting of Shri M. P. Shah Medical College at Jamnagar from 1956, the Irwin Group of Hospitals became the teaching hospital for the students and its Dean was designated the Superintendent of the Irwin Group of Hospitals. This led to the abolition of the post of Civil Surgeon for Jamnagar district from 1959, when the District Health Officer was also placed in charge of all the medical institutions in the district except the Irwin Group of Hospitals Another reason calling for such a change in the administrative set-up of the district was the introduction of the Demonstration Project in Halar district which necessitated the transfer of all the preventive and curative services from the Medical to the Public Health Department to make it self-sufficient in all respects. There is also a separate Directorate of Ayurved in charge of institutions, dispensaries and hospitals, treating patients according to the indigenous system of medicine or Ayurved.

Important hospitals in the district are described below.

Irwin Group of Hospitals, Jamnagar—With a view to provide modern medical facilities to the people of the State, Jam Ranjitsinhji of Nawanagar built in 1934 a modern hospital called the Irwin Hospital with an initial provision of 200 beds at a cost of Rs. 6 lakhs. Other institutions were added in course of time to form the Irwin Group of Hospitals which now consists of (i) Irwin Hospital, (ii) Ba Shri Sajuba Female Hospital and Ma Shri Tejuba Maternity Home, and (iii) Victoria Jubilee Hospital. The hospital was equipped with all the facilities for radium treatment, X-ray and surgical operations. As the hospital building was inadequate for the addition of various modern facilities like pathological laboratory, etc., the Government

of Saurashtra appointed a high power committee to work out a scheme for the extension of the hospital building and other facilities required for the starting of a medical college. It recommended the construction of a 150 bedded T. B. hospital, establishment of the medical college, extension of the Irwin Hospital, a new building for the out-patients department and a maternity hospital, all of which were constructed and equipped at an estimated cost of Rs. 207 lakhs. After the formation of Gujarat State in 1960, Orthopaedic, E. N. T. and Isolation Wards were also added and the number of beds increased from 266 in 1959 to 504 in 1965.

Special Facilities—The Hospital is equipped with a number of new apparatuses which provide scientific treatment to the patients. The Department of Medicine has all the equipment for the detection and diagnosis of heart diseases, such as Cardiopan, Cardiopioscope, Spirometer, heart sound amplifier, etc. The Department of Gynaecology is provided with a Kymograph for investigating the causes of sterility. The Radiology Department is fully equipped with all the essential appliances for X-ray investigation and treatment. A modern and up to date Clinical Laboratory helps conduct clinical, pathological, bacteriological and biochemical investigations. Specialists numbering twenty-seven work in the various departments of the hospital Surgery, Medicine, Anaesthesiology, Obstetrics and Gynaecology, Skin and Veneral diseases, Paediatrics, Radiology, Opthalmology, etc. An Eye Bank has also started functioning under an Eye Specialist for treating blindness by corneal grafting. The hospital has five operation theatres including two in the maternity ward and two in the new O. P. D. provided with modern and up to date equipments. The hospital has a Blood Bank and runs a Family Planning Centre. The Blood Bank is managed by one Blood Transfussion Officer, one technician, one laboratory assistant and other subordinate staff. The Family Planning Centre attached to the hospital imparts training to student nurses on family planning. The centre also conducts outdoor clinics to advise and train people in the use of contraceptives and also supplies them to the people Sterilisation operations are also performed in the hospital Other ancillary departments in the hospital are the Anti-Rabic treatment, physio-theraphy department and the saline preparation unit.

The daily average attendance at the hospital among indoor and outdoor patients in the year 1965 was 463·5 and 1,347·9. The numbers of outdoor and indoor patients treated in the hospital in the last five years are shown below.

Year		Indoor	Outdoor
1961	..	9,867	53,568
1962	..	11,257	60,821
1963	..	12,464	69,040
1964	..	13,718	80,549
1965	..	13,471	83,297

These figures bear ample testimony to the increasing facilities offered and the number of patients treated at the hospital. Chief diseases treated at the hospital are diphtheria, diarrhoea, dysentery, enteric fever, pneumonia, tuberculosis, tumours, trachoma, cataract, diabetes, diseases of the generative system, nephritis, diseases of the liver, etc. Surgical operations performed during the year 1965 numbered 11,093. Expenditure incurred increased from Rs. 523,857 in 1960 to Rs. 1,370,292 in 1965.

T. B. and Chest Diseases Hospital, Jamnagar—Shri Meghji Pethraj Shah donated a sum of Rs. 5 lakhs in the year 1955 for the construction of a T. B hospital at Jamnagar. The Government of Saurashtra accepted this donation and took immediate steps for constructing a 150 bedded hospital the foundation stone of which was laid by the late Govind Ballabh Pant, the then Home Minister of the Government of India. The construction of the building was commenced in the year 1956 and completed in 1959. The hospital started functioning from February, 1961. From 40 patients in the initial stages, the hospital is capable of admitting 100 patients since 1966. There are 4 wards in the hospital, of which 3 are for males and 1 for females. The hospital provides facilities for full radiological examination and laboratory investigations. Surgical facilities for pulmonary tuberculosis are also available. The outdoor patients department of the hospital was closed from 1965 as a district T. B. Centre has been started which runs the O. P. D. The total number of patients treated by the hospital which was 6,405 in 1961 increased to 22,429 in 1965.

Solarium—The Institute of Polyradio Therapy, Jamnagar—Late Jam Ranjitsinhji of Nawanagar was greatly impressed by the Therapeutic utility of the revolving Solarium at Aix-la-Baines, France, and made arrangements in 1933 with Dr. Jean Saidman, the inventor of the Solarium, to establish such a centre at Jamnagar. It is the only one of its kind in the east as those in France were destroyed during the Second World War. It weighs about 300,000 lbs. and has 10 cabins and provides for treatment of tuberculosis, skin diseases, rheumatism, rickets, malaria and certain types of cancer.[1] The Solarium is mounted on a 30 feet high tower. The cabins are equipped with necessary appliances for sun-ray treatment. In the centre of the platform there is a lift and a staircase and observatory on either side. To keep the cabins facing the sun, an electric motor has been attached to the tower by which the tower is made to revolve in a horizontal plane. It takes a complete round in 60 minutes and in order that rays fall perpendicular on the patients, a further adjustment is made by which beds in the cabins revolve vertically. The cabins have single bed arrangements and large windows for full ventilation. Special large concentrators are attached to the beds which concentrate two and half times the sun's rays entering through the roof and window. Filters are also placed below these concen-

1. *Administration Report of Nawanagar State*, 1933-34, pp. 61-62

trators to remove unwanted rays. Around the beds are placed lamps used to supplement the natural radiations whenever necessary. Each cabin is provided with a bathroom and a shower bath. The observatory forms a very important part of the Solarium. The meteorological observatory records the atmospheric conditions of temperature pressure and humidity, clouds, winds, etc. It is further equipped with several actinometers which measure the intensities of sun's total radiations of infra-red and ultra-violet rays. Their readings are recorded every half an hour. To avoid frequent calculations on account of variations in the intensity of solar radiations, a special device is fitted with electric current which also moves one motor, the revolutions of which are recorded on a dial with unit marks.

For the treatment of skin diseases, skin sensibility tests are taken by an instrument, called the Skin Sensitometer, which enables the detection of the erythemal and pigmentation reaction on the skin caused in different regions of the body. Satisfactory results have been obtained by the Solarium in Glandular Tuberculosis, Rheumatism, skin diseases, T. B., metabolic disorders, paralysis, etc. Patients are treated, at present, as outdoor patients in the Solarium. The Solarium is looked after by a Radiologist of Shri M. P. Shah Medical College, Jamnagar. He is assisted by one masseur, nurse, dresser, two ward servants, one *ayah* and other staff.

Mental Hospital, Jamnagar—Mental Hospital at Jamnagar was started during the Second Five Year Plan period from June, 1960 with a sanctioned bed strength of 50 patients. It provides treatment based on modern medical researches. Special types of treatment in addition to normal routine treat ment by sedatives and tranquilisers include electric and chemical convulsive therapy, psycho-therapy, recreational therapy, etc. Occupational therapy treatment trains the patients in weaving, carpentry, tailoring, cooking, gardening, etc., according to their suitability for such work, Cultural programmes such as *bhajans*, songs, *garbas*, dances and film shows, etc., are arranged for the entertainment and recreation of patients. The hospital has been supplied with a radio set and has a library where newspapers and other periodicals are kept

The statement below indicates the total bed strength and actual patient population as on 1st January, 1965.

	Beds			Patients		
	Males	Females	Total	Males	Females	Total
1	2	3	4	5	6	7
Mental Hospital Jamnagar	35	15	50	40	20	60

Source :

Annual Administration, Report on the Mental Hospitals, Gujarat State, p.3, 1965

Inmates Admitted to the Hospital, 1960-65

Year		Males	Females	Total	Year		Males	Females	Total
1		2	3	4	1		2	3	4
1960	..	13	3	16	1963	..	45	18	63
1961	..	13	9	22	1964	..	53	18	71
1962	..	39	2	41	1965	..	19	10	29

The total expenditure incurred by the hospital during the year 1965 was Rs. 79,244 and the average cost per patient about Rs. 1,277.

Government has appointed a visitors' committee for big Mental Hospitals in the State. The suggestions made by it for the improvement of conditions in hospitals are generally accepted by the Government.

Dolatsinhji Hospital, Dhrol—The Dolatsinhji Hospital at Dhrol was originally started as the Victoria Diamond Jubilee Dispensary in 1905. In the year 1938 the dispensary was converted into a hospital with a capacity of 12 beds and was named Dolatsinhji Hospital. The entire expenditure for the hospital was borne by the former State of Dhrol. A new building for the hospital was constructed outside the town and completed in the year 1948. The hospital is headed by a Medical Officer assisted by one Assistant Medical Officer, three compounders, one midwife and others. This institution which is a Government hospital provides for treatment of indoor and outdoor patients and has facilities for X-ray, screening and infra-red and ultra-violet rays and has a small operation theatre. It is proposed to start a maternity ward in the hospital in the near future. The number of beds available in the hospital has remained the same, i. e., 12 only. The number of indoor patients treated in the hospital was 270 in 1960 but increased to 325 in 1965. Similarly the number of outdoor patients increased from 17,803 to 21,551 during the same period. The expenditure incurred in the year 1965 amounted to Rs. 24,033.

Referral Hospital, Khambhalia—The Referral Hospital at Khambhalia was originally started as "Monghibai Hospital" in the year 1912 when late Gopalji Valji donated a sum of Rs. 50,000 to the State of Nawanagar. The hospital was declared open in December 1912. It had 12 beds, six each for males and females. As it is a Government hospital, the entire expenditure on its maintenance is borne by the Government. From Rs. 17,830 in the year 1953-54 it has increased to Rs. 23,800 in 1965-66. The hospital provides treatment to indoor and outdoor patients. Since the year 1965 the hospital has been converted into a Referral Hospital with an increase in the number of beds to 52 from that year. A clinical laboratory has been started in the hospital since 1958 which carries out blood, urine and sputum examinations. It will soon be provided with a X-ray plant, ambulance van and laboratory equipments

The following are the statistics of indoor and outdoor patients treated in the hospital.

Year			Indoor patients	Outdoor patients
1			2	3
1948	..	..	54	8,110
1951	..	..	208	13,739
1955	..	..	178	21,745
1960	..	..	237	19,532
1965	..	..	354	21,109

Civil Hospital, Dwarka—A dispensary at Dwarka was started in 1936 with four emergency beds during the time of the former Baroda State. It was managed by a Medical Officer, Assistant Medical Officer and other staff. As there was no other hospital in the entire Okhamandal Prant of Baroda State and as the dispensary was small, the need for a hospital was keenly felt. The dispensary was, therefore, converted into a hospital in 1938 with 22 beds including 8 for females. The hospital provides for treatment of minor diseases and attends to minor surgical work. Since it is a Government hospital, the expenditure for its upkeep is borne by the Government. The number of patients treated by the hospital is given in the following statement.

Year			Patients treated	
			Indoor	Outdoor
1950	..	..	128	3,362
1955	..	..	217	3,001
1960	..	..	476	14,500
1965	..	..	387	13,208

M. P. Shah Maternity Home and Dispensary, Dabasang—Late Meghji Pethraj Shah built in 1955, a dispensary with a maternity home at an estimated cost of Rs. 75,000 at Dabasang, his birth-place, for providing medical treatment to local inhabitants, and handed it over to the former Government of Saurashtra for management. The Maternity Home is looked after by one Medical Officer, one midwife, one *ayah* and one ward boy. The total number of beds available in the maternity home is four. It provides free cot and medical services. Relatives' quarters have also been constructed After the introduction of Panchayati Raj, the Maternity Home is managed by the taluka panchayat.

Number of Doctors—The total number of doctors in the district according to the Census of 1951 was 178 of whom 170 were males and 8 females. Between 1951 and 1961 there was a considerable increase in their number which rose to 330 (306 males and 24 females). In terms of population served, there was one doctor for every 2,510 persons in 1961 as against 3,22[illegible] in 1951. 307 *vaidyas* were found working in Jamnagar district in June, 1967.

PUBLIC HEALTH

Administrative Set-up—As seen earlier, the Public Health Department is headed by the Director of Health and Medical Services who advises Government in all matters concerning public health administration in the State. He is assisted by one Deputy Director of Public Health Services (H. Q.) and Assistant Directors of Public Health in charge of various schemes such as B. C. G. vaccination, T. B. Control, malaria, filaria, leprosy, maternity and child health and health education. In addition to this there are two Regional Directors of Public Health Services at Rajkot and Baroda. For the Administration of public health, each district has a full-time District Health Officer. In Jamnagar district, the District Health Officer is also in charge of all medical and health institutions and Ayurvedic dispensaries except the Irwin Group of Hospitals which has been attached to Shri M. P. Shah Medical College at Jamnagar. The main activities of the Public Health Department are: (1) preventive and curative measures, (2) vaccination, (3) control of T. B., (4) control of malaria, (5) control of filaria, (6) improvement of vital statistics, (7) improvement of birth and death rgistration, (8) maternity and child welfare, (9) family planning, and (10) distribution of skimmed milk powder.

In public health activities the District Health Officer is assisted by one Resident Medical Officer, one Epidemic Medical Officer, one Sanitary Inspector, one Vaccination Officer, and a Sanitary squad consisting of one Mukadam and three *majdoors* in the district. The District Health Officer organises measures for public sanitation and hygiene at fairs and festivals and also investigates the causes of origin and spread of infectious diseases such as cholera, small-pox, whooping cough, plague, etc. He advises the municipal authorities, in matters connected with health, sanitation, drainage and water supply, inspects primary health centres, maternity and child health centres, family planning programmes and looks after the working of the National Malaria Eradication Programme. The sanitary squads are employed for cleaning villages, disinfection of drinking water and infected materials in case of infectious diseases construction of soak pits and latrines suitable for rural areas and removal of manure heaps from inhabited localities. Vaccinations and revaccinations on a large scale by Sanitary Inspectors and Vaccinators are also arranged.

Distribution of Skimmed Milk Powder—One of the important trends of modern times is the emergence of co-operation among Governments and international agencies sponsored for promoting welfare in underdeveloped countries The United Nations with its variegated agencies helps to promote social and economic development of underdeveloped countries in the world by aiding and assisting them financially and techrically. One of such international agencies is the UNICEF which helps in protecting health of expectant and nursing mothers by supplying expert advice and milk

powder which is distributed by the Health Department through the maternal and child health centres.

Preventive and Curative Measures—Several deaths occurred in the past due to epidemics like small-pox, malaria, etc., on account of the absence of integrated public health activities which have been placed on a sound footing since Independence. Vaccinations and revaccinations, spraying of D. D. T. and collection of blood smears and survey of affected and threatened areas have helped substantially in reducing the death rate which, before Independence, claimed a heavy toll of lives.

Control of Malaria, Small-pox, T. B.—Control of diseases like tuberculosis, malaria, filaria and small-pox has been adopted as an important aspect of public health measures undertaken by Government for improving the health of the people. D. D. T., B. C. G., and small-pox vaccination and treatment of cases of filaria in the filarious areas have been intensified since Independence. All these measures have successfully brought these diseases under control.

Malaria—The former Government of Saurashtra had set up malaria organisations in each district. D. D. T. was sprayed in affected and threatened areas and anti-malaria drugs were distributed during the First Five Year Plan. During the Second Five Year Plan period, malaria eradication work was reorganised by constituting three Units each covering a population of one million under the National Malaria Control Programme. Jamnagar district was placed in charge of Rajkot Unit which carried out annual assessment surveys in 1958-59 in the villages of this district, and anti-malaria drugs were distributed through the staff of the Public Health Department. A six years' phased programme from 1958 59 to 1963-64 was drawn up to intensify the spraying of D. D. T. in all endemic and hypoendemic areas and to conduct surveillance operations. Additional posts of technicians were sanctioned by the Government to cope up with the work of collection of blood smears in surveillance operations. Training classes for technicians were held at Rajkot in 1961. The malaria organisation carried out (1) indoor spray of D. D. T. in all endemic areas with special rounds wherever necessary and one round in hypoendemic areas, (2) continuance of active and passive surveillance programme, (3) examination of blood-smears collected through active and passive surveillance agencies, (4) medical treatment of all cases showing malaria parasites in their blood till they are completely cured, (5) epidemiological investigations in respect of each and every malaria case so as to find out genesis of infection in a region, (6) anti-epidemic measures for preventing reproduction of cases, and (7) health education with a view to raise awareness of the malaria danger. The intensive efforts that have been made since Independence have reduced the incidence of malaria by bringing down the cases to 1,423 or 1·27 per cent out of a total number of 111,729 cases of various diseases reported in 1965.

Filaria—The object of Filaria Control Programme is to carry out control measures in the affected areas. The Filaria Unit for Jamnagar with headquarters at Rajkot was sanctioned as a Control Unit in 1954, but started functioning regularly from 1959, when it was shifted to Jamnagar. The unit is headed by a Filaria Officer of gazetted rank assisted by one Research Officer, one Assistant Entomologist, one Health Educator, two Filaria Inspectors, one Cinema Operator, four Insect Collectors, and 24 Field Workers In 1958 and 1959 Dieldrin spray was carried out in rural areas of the district and mass therapy was provided in areas of Bhanvad, Salaya and Khambhalia talukas in 1961. The entomological work started since 1958 is looked after by the Assistant Enotmologist and is reported to have made progress in the district. The monthly consumption of mosquito oil by the Jamnagar Unit is about 10,000 litres. The Unit hopes to conduct regularly every month the collection and dissection of mosquitos which is done at Dwarka, Okha, Mithapur, Lalpur, Bhanvad and Sikka. Blood survey work started since 1961 has covered Sikka, Mithapur, Okha, Jamnagar, Khambhalia and Salaya till 1966. The work of health education and publicity is carried out through the Health Educator.

Small-pox—It is gathered from the Annual Administration Reports of Nawanagar State that as early as 1912-13 the State was affected by an epidemic of small-pox in 46 villages. In 1918-19, 111 cases in 12 villages of the State were reported out of which 16 proved fatal. Thereafter the number of villages affected began to decrease on account of the measures taken by the State administration by organising 10 circles with one vaccinator in each Unit and two relieving vaccinators.

After Independence the Government of Saurashtra and then the Government of Bombay, after the formation of bilingual Bombay State, undertook a mass campaign of vaccination and revaccination. Regulations under the Epidemic Diseases Act, 1897, were enforced and measures like propaganda, prompt notification of small-pox cases and appointment of temporary vaccinators to assist the regular staff in the threatened and affected areas were adopted. Concerted action taken by Government has helped in bringing the epidemic under effective control and wiping it out by bringing down the cases of deaths due to small-pox from 155 in 1961 to only 9 in 1965.

Following are the statistics of vaccination and revaccination between 1960-61 and 1964-65.

Year	Vaccination	Revaccination
1	2	3
1960-61	24,245	89,276
1961-62	26,392	66,246
1962-63	54,232	357,137
1963-64	44,460	151,663
1964-65	36,506	16,903

Source :

The District Health Officer, Jamnagar

Tuberculosis—Tuberculosis and Chest Diseases Hospital at Jamnagar was started by the former Saurashtra Government on receipt of a donation of rupees five lakhs from late Shri Meghji Pethraj Shah. Under the B. C. G. immunisation scheme, mass vaccination was carried out in the district in 1958, as B. C. G. inoculation makes it possible to detect T. B. germs in a body and gives immunity from the disease for a considerable period. The scheme has been continued by the Gujarat State and is functioning under an Assistant Director of Public Health in charge of B. C. G. Vaccination and T. B. Control Scheme. Under this scheme 368,609 persons in the district were registered for vaccination between 1964 and 1967. Of these 166,138 have been vaccinated up to December, 1967.

Family Planning Programme—Population explosion which has been going on since 1931 has been causing serious concern to the Government. Whatever the gains which accrue from the implementation of the Five Year Plans, are wiped out by the menacing growth of numbers which is 2·6 per cent in Gujarat. With a view to arrest this abnormal growth, family planning programme is being vigorously pursued all over the State. It now forms a very important part of the district health programme which is given top priority and implemented through the Medical Officer of the Primary Health Centres. The Centres distribute contraceptives among the needy married couples. The most recent development in the field of family planning has been the introduction of I. U. C. D. (Intra Uterine Contraceptive Device) known as Lippes Loop which is made of polythylene and shaped like double 'S', with nylon thread at the lower end. The District Health Officer with the help of District Family Planning Officer organises camps for popularisation of this device. Government has appointed social workers, field workers and attendants who move from house to house for free distribution of contraceptives as also to explain the benefits of planned parenthood and to prepare married males and females for undergoing operations.

The District Family Planning Officer is responsible for implementation of the family planning programme in the district. He is assisted by a male and female Assistant Surgeon, district Health Educator and others. There are ten family planning centres in the rural areas and five in the urban areas of the district. These centres are staffed by 9 Medical Officers, 18 field workers, 36 auxiliary field workers and 6 social workers. Facilities for performing vasectomy and tubectomy operations are also provided at these centres. Males and females undergoing operations are respectively paid Rs. 15 and Rs. 25 each.

The progress achieved in the field of family planning shows that between 1961-65, 1,401 vasectomy and 938 tubectomy operations have been performed in the district, and 4,869 Intra Uterine Contraceptive insertions made till December, 1966

Primary Health Centres—Primary health centres provide basic health services in rural areas as well as maternity and child health services in an integrated manner and also carry out multi-purpose functions, preventive and curative. Every primary health centre in the district is provided with a class two Medical Officer, one health visitor or nurse-midwife, four midwives (one for main centre and three for sub-centres), one sanitary inspector, one driver, four class four servants and two X-ray technicians. The main services provided at these centres are (1) medical relief, (2) maternal and child health services, (3) family planning, (4) school health, (5) health education, (6) environmental sanitation, (7) control of communicable diseases with priority for malaria, (8) improvement of vital statistics, (9) trachoma, control of leprosy, etc.

In Jamnagar district, three health centres were established at Kalavad, Kalyanpur and Bhanvad during the First Five Year Plan, two at Jamjodhpur and Lalpur during the Second, and five at Aliabada, Palambha, Latipar, Varvala and Salaya during the Third Plan period. Each taluka is now served by a primary health centre.

Maternity and Child Welfare Centres—Prior to Independence, as public health sector was not properly organised, facility of health centres did not exist. The health of women was seriously impaired during their pregnancy and delivery, as trained nurses and midwives were not available and the work was performed by untrained *ayahs* and indigenous *dais* with the result that death rate of both women and infants was higher. After the implementation of Five Year Plans growing attention is being paid to the training of nurses and establishment of health centres and sub-centres and maternity and child health centres which provide medical relief, maternal and child health services, family planning services and control of communicable diseases.

Over and above the maternal and child health services provided by the primary health centres in the district, Government has started maternity and child health centres which help in lowering the high rate of mortality among women of child bearing ages as well as reduce the high infant mortality rate. Besides one M. C. H. Centre located at Dwarka, there were nine grant-in-aid maternity and child health centres and three sub-centres in the district in 1966 working under the direction and supervision of the District Health Officer. Skimmed milk powder and drugs received as gift from the UNICEF are distributed by the M. C. H. Centres.

Health Education—The success or otherwise of any programme on health depends upon the wholehearted co-operation and participation of the people for whom it is meant. Health education has always remained one of the important factors of the health programme. With this end in view, health propaganda is carried out by the District Health Officer through group

talks amongst the village people. The State Government has started State Health Education Bureau under an Assistant Director of Public Health, in charge of the Bureau. The District Health Officer also looks after the District Demonstration Scheme, in which he is assisted by one Public Health Nurse, one Family Planning Officer, one Sanitary Inspector, one Assistant Health Officer, two social workers, one lady Medical Officer, one Health Educator, 2 compounders and four attendants who carry out demonstrations for dissemination of information pertaining to eradication of communicable diseases.

District Demonstration Project—In 1959, Halar district (present Jamnagar district) was selected for the District Demonstration Project in accordance with an agreement entered into by the Government of India with the World Health Organisation and the UNICEF. Under this scheme the preventive and curative services were transferred from the Medical Department to the Public Health Department. The main objectives of the Demonstration Project were (1) co-ordination of all existing medical and public health activities so as to ensure their maximum integration with one another as soon as possible, (2) linking of primary health centre services and other hospitals in as effective a manner as possible, (3) the gradual incorporation in all practical respects of such special activities as mass campaigns, venereal diseases control, tuberculosis control and malaria control previously undertaken as separate entities, (4) co-operation and co-ordination with other public services or voluntary agencies engaged in activities connected with health with a view to ensure maximum benefit to the community and (5) development of routine methods of collecting vital statistics as also such information on epidemiology as may be required from time to time.

AYURVEDIC SYSTEM OF MEDICINE—Ayurved or the indigenous system of medicine has made a distinct contribution in the field of medical science. It flourished in the past but gradually declined on account of the encouragement given to allopathy in recent times, absence of scientific research in Ayurved and want of qualified *vaidyas* well-versed in this science. There were certain places, however, where it continued to flourish and preserved its popularity under the patronage it received from some of the rulers.

Ayurved is considered to be the science of life and health. The valuable principles of hygiene and public health along with the dietary values of each article of food and its effect on human health mentioned in the Ayurvedic texts constitute a good treatise on public health. Ayurvedic tests are quite helpful in diagnosing diseases without any appreciable expense. From 200 B. C. up to 1600 A. D., full fledged Ayurvedic hospitals treating ailments, doing all kinds of *panchakarma* and surgery and attending to public health problems existed all over India. It was on account of foreign invasions and the advent of the British rule in India which patronised Allopathy, that Ayurved suffered a severe set-back.

Revival of Ayurvedic System—Fully aware of the efficacy of the indigenous systems of medicine, the rulers of Nawanagar State, while providing all modern means of medical treatment, gave every encouragement to the development of Ayurved in their State. History shows that during the reign of late Jam Tamachi Tagad, in the first half of the 18th century, when an epidemic of plague was rampant, it was brought under control by the *Rajvaidya* of Nawanagar. During the regime of late Jam Vibhaji, eminent *vaidyas* like Zandu Bhattji and Bavabhai Achalji, who had attained an all-India reputation, served the people of Jamnagar and Saurashtra and laid the foundation for the revival of Ayurved. They respectively developed two different systems of treatment through *kasthaushadhi* and *rasaushadhi*. With a view to further develop Ayurved, the late ruler Digvijaysinhji and Maharani Gulabkunvarba formed a society called Gulabkunvarba Ayurvedic Society in 1940. The Society received financial and other assistance from the ruling family. Juvansinhji Ayurvedic Library and Museum was established in 1941. Encouraged by the lively interest taken by the rulers, Dr. Pranjivan Mehta, the then head of the State Medical Department invited from all over India prominent *vaidyas* and other experts in Ayurved and formed an Editorial Committee for the translation of *Charak Samhita*, the standard work on Ayurved. A critical translation was published in the year 1946 in six parts in English and two Indian languages, viz., Gujarati and Hindi. To house the various activities pertaining to Ayurved it was found necessary to construct a large and spacious building. A beginning in this direction was made by Sheth Chatrabhuj Gordhandas who donated a sum of Rs. 3·5 lakhs. The ruling family also contributed Rs. 10 lakhs. An imposing and beautiful structure called the Dhanvantari Mandir was constructed in a large campus of the institution. It has a spacious and beautiful auditorium, provided with 829 chairs. Walls are decorated with three famous murals, one of which depicts life in a hermitage with a *rishi* imparting knowledge under the tree. The second bearing the portrait of God Dhanvantari with a root of *neem* tree, a knife and a pot containing *amrit* in his hands is placed in the centre, while the third shows how foreigners were attracted towards this ancient system of medicine. An Ayurved Vidyalaya was also started and considerable money was spent for providing it with modern and up to date equipments and other requisites for study and research. Large and spacious hostels were built for students. Research in Ayurved and its propagation also continued side by side.

Government of India also realised the importance of Ayurved and turned its attention towards the revival and development of Ayurved. Recognising the importance of Jamnagar for conducting scientific research in Ayurved where so much work was done in the past, the Central Institute of Research in Indigenous Systems of Medicine was started by the Government of India at Jamnagar in 1953 on the recommendations of the Chopra Committee and the Pandit Committee. A centre for post-graduate training in Ayurved was

started with the co-operation of Shri Gulabkunvarba Ayurvedic Society, Government of Saurashtra and the Government of India. The Gujarat Ayurved University, the only one of its kind in the country, was inaugurated in 1967 to develop *shuddha* Ayurvedic system of medicine and conduct and co-ordinate research undertaken at various centres in the State, the particulars of which are given in Chapter XIV—Education and Culture.

Institute for Ayurvedic Studies and Research, Jamnagar—Various activities in the field of Ayurved conducted at Jamnagar were co-ordinated in 1963 by the formation of the Institute for Ayurvedic Studies and Research by amalgamating Shri Gulabkunvarba Ayurved Mahavidyalaya, the Central Institute of Research in Indigenous Systems of Medicine and the Post-graduate Training Centre. The Institute promotes research in indigenous systems of medicine and provides facilities for training of research workers. The administrative control of the Institute is vested in a governing body composed of those interested in the sound development of Ayurved on scientific lines. It consists of 3 representatives of the Central Government, 3 of the State Government and 3 of Shri Gulabkunvarba Ayurvedic Society. The Executive Committee consists of the Chairman, two experts of the profession (Ayurvedic and Modern) nominated by the Government of India and the Director of the Institute working as Member Secretary. The research policies and programmes of the Institute are directed by a Scientific Advisory Council.

The main departments of the Institute are (1) Department of *Dravyadi-vijnaneeya*, (2) Department of *Rasa shastra*, (3) Department of *Kaya chikitsa*, (4) Department of *Panchakarma* and *Agada tantra*, (5) Department of Basic Principles, and (6) Department of *Prasuti tantra*.

Panchakarma is an essential part of Ayurvedic treatment, which was well-nigh forgotten but is being revived now. There is a separate department devoted to this branch of treatment at the Institute.

The Institute has carried out studies of 2,000 cases in *pandu roga, grahani roga, udar-roga, krimi-roga, amavata, shwasa roga, hrid roga, shotha, vata-vyadhi shlepada*, etc. The Pharmacy section of the Institute prepares Ayurvedic medicines for the indoor and outdoor patients of the hospitals of the Institute. It also offers facilities for training in *Bhaishajya-Kalapana* to both under-graduate and post-graduate students. Medicines prepared by this section are supplied to the dispensaries opened by the Employees' State Insurance Corporation.

A well organised museum is another useful section of the Institute where important specimens of medicinal plants are preserved. For the study of green plants, gardens in the Jubilee Hospital, Sajuba Hospital and Dhanvantari

which possess some of the rare specimens brought from other places and used for the purposes of study.

Juvansinhji Library and Museum—The Juvansinhji Library and Museum was started in the year 1941. With the formation of the Institute of Ayurvedic Studies and Research in 1963, the libraries of Shri Gulab-kunvarba Ayurvedic College, Central Institute of Research in Indigenous Systems of Medicine and the Post-graduate Training Centre were amalgamated into a central library which is now housed in this building. The library which started with 800 books now has 15,000 books in different Indian languages. It contains books on Ayurved and modern scientific treatment besides a collection of rare manuscripts and printed volumes. *Vedas, Puranas,* audio-visual literature and disctionary prepared by ancient and modern writers and volumes in Sanskrit and other languages are also available. The library has rare books like Review of History of Medicine (1887), Materia Medica of Hindustan, History of Drugs, Vol. I & II (1712) and Himalayan Flora, etc., besides manuscripts of Charaka and Sushruta, and *Yoga Ratnakar*. Photographs, pictures, charts and models pertaining to different subjects of Ayurved and equipments are also exhibited in the museum. A reading room has also been provided in the library where periodicals, newspapers and magazines on Ayurvedic and modern systems of medicines are kept for the benefit of students.

Press and Publications Department—The Institute has its own Press and Publications Department which publishes a quarterly called 'Ayurvedaloka'. It has also published books on *pandu roga, shulva shastra, deha prakriti vignan*, etc.

Directorate of Ayurved —With a view to develop and revive Ayurved a separate Directorate of Ayurved was organised by the former Government of Saurashtra. A similar action was also taken by the Government of Bombay in 1957. After the integration of Saurashtra into bilingual Bombay State a separate regional office was established at Rajkot in October 1957 The Government of Gujarat also created a separate section with Deputy Director of Ayurved working under the Medical Department. This post was upgraded into that of Director of Ayurved from July, 1960. He is assisted by an Assistant Directer of Ayurved, a Personal Assistant and other staff. The Director of Ayurved is the head of all Ayurvedic institutions in the State, including colleges and hospitals. The principal activities of the Directorate are (1) to provide medical relief to the public in Ayurvedic way through Ayurvedic hospitals and dispensaries and by distributing Ayurvedic medicinal chests to treat minor diseases in villages, (2) to impart education in Ayurved in Ayurvedic colleges and institutions, (3) to conduct research at Ayurvedic colleges and hospitals, and (4) to standardise Ayurvedic preparations. The Directorate has no regional offices in the State, but

District Ayurvedic Officers function under the District Panchayats in the districts of Rajkot, Bhavnagar, Junagadh, Jamnagar and Surendranagar and look after the administration and proper working of the different activities of Ayurved.

Ayurvedic Hospitals—The Institute conducts four Ayurvedic Hospitals, viz., (1) Jubilee Hospital (Research Hospital), (2) Sajuba Hospital, (3) Tejuba Hospital, and (4) *Ayurved chikitsalaya*. The Hospital section is divided into two departments, viz., (1) Inpatients' department, and (2) Out-patients' department. It has all facilities for the diagnosis and treatment of patients from the Ayurvedic point of view. The outpatient department is very popular and the average attendance per day is nearly 400 to 500 patients. The I P. D. section of the hospital is also rendering useful service as the full strength of the beds is occupied. The *panchakarma* department has attracted patients from all over the country. 214 beds in the four hospitals aforementioned are distributed as follows ; (1) Modern and Ayurvedic study 24, (2) Surgery, E. N. T.-18, (3) Midwifery and Gynaecology-18, (4) Ayurvedic Team-24, (5) *Sharir vijnan*-12, (6) *Siddha*-12, (7) *Panchakarma*-32, (8) *Kaya chikitsa*-36, (9) *Dravyadivijnaneeya*-16, (10) Basic Principles-10, and (11) *Rasa-shastra*-12.

The number of patients treated by these hospitals during the last three years are shown below.

STATEMENT XV·1

Patients treated in Ayurvedic Hospitals, Jamnagar

Year	O. P. D.			I. P. D.			Total		
	Males	Females	Children	Males	Females	Children	Males	Females	Children
1	2	3	4	5	6	7	8	9	10
1963-64 ..	38,453	30,721	16,884	1,266	1,758	273	39,719	32,479	17,157
1964-65 ..	60,575	57,850	20,418	1,218	1,842	348	61,793	59,692	20,766
1965-66 ..	81,833	62,914	16,564	1,480	1,707	330	83,313	64,621	16,894
Total ..	180,861	151,485	53,866	3,964	5,307	951	184,825	156,792	54,817

Source :

1. *Gujarat Ayurved University Souvenir*, 1967
2. Institute for Ayurvedic Studies and Research, Jamnagar

Ayurvedic Dispensaries—There are 45 Ayurvedic dispensaries (as shown in Appendix I) in the district and each one of them is staffed with one *vaidya*, one midwife and a peon. Moreover, 357 Ayurvedic medicine

chests to treat minor diseases have also been distributed in the villages of the district. These boxes are entrusted to a responsible person in every village.

MEDICAL INSTITUTIONS

The Ranjit Nursing Association, Jamnagar—With the expansion of medical institutions in the State, it was necessary to have trained nurses, midwives, etc., to look after the patients in the hospitals. The rulers of Nawanagar State were alive to the problem of trained nurses and with that aim in view started the Ranjit Nursing Association in 1934. This association is affiliated to the Bombay Presidency Nursing Association and is attached to the Irwin Hospital. It prepares student nurses for the B. P. N. A. examination. In the first year of its functioning 25 candidates were trained. The trainees were provided with free lodging, uniform and a scholarship of Rs. 20 per month. Jugatram Vakil, an inhabitant of Jamnagar, donated a sum of Rs. 10,000 for the construction of nurses' quarters. The State Government also contributed an equal amount and the quarters were named, "The Dayaram Nursing Quarters". After the State's merger in 1948 the strength of the Nursing School was increased from 43 in 1951 to 51 in 1956. At the end of the Third Five Year Plan, 136 inmates were trained. The target for the Fourth Five Year Plan period is placed at 200.

Rural Health Training Centre, Aliabada—The Rural Health Training Centre at Aliabada has been established since October, 1959 with a view to impart training in Public Health orientation to the M. B. B. S. students of the Medical College, Jamnagar. The centre possesses the facility for training 30 medical internees (20 boys and 10 girls). The internees are called in batches of 20 and trained for a period of two months. Nurses are imparted training for periods ranging from one to three weeks. The field and training staff of the unit consists of one Medical Officer of Health, one Lady Medical Officer, one Public Health Nurse, 3 Sanitary Inspectors, 4 Health Visitors, 8 Auxiliary Nurse Midwives, one Field Worker, one Senior Clerk, one Junior Clerk, one Laboratory Technician and 7 class four servants. The Medical Officer of the Centre and the internees regularly visit the maternity and child health centres and sub-centres and distribute family planning devises to the needy married couples. The Centre also undertakes small-pox vaccination and revaccination to children within its jurisdiction. The staff of the World Health Organisation posted at Jamnagar gives valuable advice to the Health Training Centre in such fields as control of malaria, tuberculosis, leprosy, venereal diseases, small-pox, developing mother and child health and nursing services, promoting medical education, environmental sanitation, rural health, health education and maintenance of vital and health statistics.

The Centre has conducted research surveys in vital statistics and survey of health of school children and sanitary condition of school buildings in the area. It proposes to conduct in the near future, Nutritional Assessment Survey

of school children, General Health Survey of industrial area and a T. B. Survey for determining the infection rate of tuberculosis in rural areas.

SANITATION—PROTECTED WATER SUPPLY

Jamnagar City Water Supply Scheme—The problem of availability of pure water in sufficient quantity has been a very old problem for the city of Jamnagar. Till 1939 the city depended upon borings and wells as the only sources of water. Three tube wells were fitted with deep well pumps worked by electric energy with masonry tanks fitted with cocks having a capacity of 2,000 gallons. This was too inadequate for meeting the needs of the people. Jam Ranjitsinhji, therefore, planned the construction of the Gangasagar Tank and Water Works at an estimated cost of Rs. 15 lakhs. It was completed in 1938 during the regime of his successor Jam Digvijaysinhji, who renamed it 'Ranjitsagar'. The Ranjitsagar Dam constructed on the river Nagmati has a catchment area of 106 sq. miles, a total length of 10,900 feet and height of 52'5 feet. Its storage capacity is 9,870 cubic feet of water. Water from this reservoir flows through the filtration plant through 30" diameter pipelines, the total length of which is 23,000 feet, and then passes through two filter beds each having a capacity of 2 million gallons per day. The water from the filter beds flows into the clear water sump of 1·25 lakhs gallons capacity. But with the increase in city population and the establishment of a number of new industries, the existing sources of water supply again became inadequate. Keeping in view the future industrial growth, its strategic importance and increase in population, the Jamnagar Municipality drew up in 1956 a scheme estimated to cost Rs. 80·82 lakhs to provide water to the city and divided it into two stages. In the first stage, it will provide 45 lakh gallons of filtered water per day and 60 lakh gallons in the second stage, when the underground drainage is expected to be completed. The works of gravity main, filter house, high level reservoir and major portion of distribution system in Jamnagar have been completed. Filtered water is being supplied since February, 1963. The total expenditure incurred till the end of the Third Five Year Plan comes to Rs. 41·57 lakhs.

Khambhalia Water Supply Scheme—The water works at Khambhalia, called Ranjitsinhji Water Works, are in existence since the year 1935. The water works were constructed from the funds collected by the Bhatia community of Khambhalia and handed over to the Nawanagar State for maintenance. The Khambhalia Municipality which came into existence in 1951 looks after the water works. The status of the municipality has been changed to that of Nagar Panchayat after coming into force of the Panchayati Raj from 1st April, 1963. The water works consist of two tanks having a capacity respectively of 60,000 and 15,000 gallons. Water is obtained from two wells, 60 feet deep and 25' in diameter and joined by a link canal dug in the bed of Ghi river. Water at the rate of 20 gallons per head per day is

supplied to the public from four storage tanks constructed at convenient places in the town and provided with water taps for use by the public. Nearly 2,000 private domestic connections have also been provided. Bleaching powder, lime-stone, etc., are used in water purification.

Dwarka Water Supply Scheme—The Dwarka water supply scheme was taken up for execution in March 1961. It has been devided into two parts (i) Head Works and (ii) Distribution system. The Head Works, which are located at Vasai about six miles north of Dwarka, consist of construction of four supply wells (24" in diameter), sump and pump house, generator, chlorination, 12" R. C. C. rising main and high level reservoir. The water from these wells is pumped to a sump of 20,000 gallons and brought to a high level reservoir of 50,000 gallons through 12" diameter pipelines, 36,000 feet in length. The construction of three wells was over by 1966, while the fourth one was completed in 1967. An expenditure of Rs. 12·44 lakhs has been incurred in the execution of the scheme which has a capacity of supplying 2·10 million gallons of drinking water.

RURAL WATER SUPPLY SCHEMES—The rural water supply schemes executed by the Public Health Works Division, Jamnagar, during the Third Five Year Plan period cover:

(i) *Amran Group of 11 Villages*—Originally undertaken during the Second Five Year Plan, the scheme was aetually implemented and completed during the Third Plan at an estimated cost of Rs. 8·95 lakhs. It supplies 228,000 gallons of water to eleven villages.

(ii) *Raval Gorana Water Supply Scheme*—Constructed at an estimated cost of Rs. 2·54 lakhs, the scheme has a capacity of supplying 94,000 gallons of drinking water.

(iii) *Bhatia Water Supply Scheme*—Constructed at an estimated cost of Rs. 1·56 lakhs, the scheme is designed to supply 44,500 gallons of water, and

(iv) *Lamba Water Supply Scheme*—Constructed at an estimated cost of Rs. 0·90 lakh it has a capacity of supplying 70,000 gallons of drinking water.

In order to assess the exact magnitude of the problem of drinking water in the rural areas of the State the Rural Water Supply Investigation Division, Rajkot, made use of data collected by the State Bureau of Economics and Statistics in 1962-63 and 1964-65 and classified the villages of the district in four broad categories, viz., (1) difficult and scarcity areas, (2) specially backward class areas, (3) areas with unsafe and unwholesome water supply, and (4) areas with inadequate water supply to be raised to the maximum standards. The work of providing water to villages classified under (i) and (iv) is proposed

to be completed during the Fourth and Fifth Five Year Plans, while schemes under (ii) and (iii) will be executed thereafter. Under this scheme,[1] (i) 58 villages of Kalyanpur, Khambhalia, Jamnagar, Kalavad, Dhrol, Jodiya and Okhamandal talukas, classified as difficult and scarcity areas, will be provided water at an estimated cost of Rs. 23·85 lakhs, (ii) 3 villages of Bhanvad and Jamjodhpur talukas, declared as specially backward class areas, will be provided drinking water at an estimated cost of Rs. 0·16 lakh, (iii) in 29 villages of Khambhalia, Dhrol, Jamnagar, Lalpur, Jamjodhpur, Bhanvad, Kalavad and Kalyanpur talukas, were unsafe or unwholesome water supply will be set right at an estimated cost of Rs. 12·55 lakhs and (iv) 109 villages of the district having inadequate water supply, drinking water will be provided at an approximate cost of Rs. 64·98 lakhs.

Underground Drainage—In Jamnagar city, rain and waste water was disposed of through cess pools made in the ground causing malaria which was widespread in the absence of gutter. The Jamnagar Municipality, constructed in 1950-51 open surface drains which are in existence even today for disposal of waste water by incurring an expenditure of Rs. 10 lakhs. Waste water from these drains overflows at some places in the city and affects its sanitation. The municipality has, therefore, constructed gutters at the end of each road or lane for disposal of waste water. It has now decided to construct underground gutters in the city and prepared detailed plans and estimates for the purpose. The scheme, which is expected to cost Rs. 80 lakhs, is to be implemented in stages by making necessary provision in the annual budget of the municipality. The construction has commenced from the year 1964 and underground gutters from Digvijay Plot to Navagam, Pancheshwar Chowk to Bedi gate and in Nanakpuri areas have been provided at an expenditure of Rs. 3·50 lakhs incurred during the Third Plan. The municipality proposes to spend Rs. 40 lakhs during the Fourth Plan while the remaining amount will be spent in the subsequent years.

1. Executive Engineer, Rural Water Supply Investigation Division, Rajkot

APPENDIX I

Panchakarma Therapy

Panchakarma therapy is a unique method of treatment evolved by Ayurved. It aims at eliminating vitiated materials from the body and sets right the body constituents which have become imbalanced. Elimination is resorted to when the vitiated constituents are in excess, and could not be repaired by *shaman* therapy. *Panchakarma* is so called, as it has developed five methods of treatment known as (i) *vamana* (emetics), (ii) *virechana* (purgation), (iii) *niruha basti* (medicated enemate), (iv) *anuvasana basti* (enemate of medicated oil), and (v) *nasya* (medication by nasal passage). In surgery, *rakta moksha* (blood letting) is included and *anuvasana basti* is excluded. Since unwanted materials are eliminated from the body through the practice of *panchakarma*, the treatment is also *shodhanakarma* or elimination therapy.

Sneha and *swedana* which are essential parts of *panchakarma* are called *poorvakarmas* or preparatory treatment. They prepare the patient for the subsequent treatment of any of the main *karmas*. For *snehana*, oil, *ghee* or animal fat is used internally. When used externally, it is called *abhyanga*. Internal *snehana* (Oliation therapy) is used in gradually increasing doses for 3 to 7 days to dissolve the waste materials from the body. Thereafter *swedan karma*, i.e., application of heat is carried out in various forms to loosen the outgoing materials from the body. It is only after the *sneha* and *swedana karmas* are completed that the main *karmas* (processes) are started. Otherwise, it will harm the body. Then follows the main treatment based on the following.

For *vamanakarma* emetics are given with proper precautions under the guidance and supervision of a trained *vaidya*. Though used rarely it is a sure remedy for many ailments. This is an essential part of treatment for various kinds of allergic disorders.

Virechana is used commonly by *vaidyas*. Given scientifically as described by the texts of Ayurved, it gives sure results in *jalodara* (*Ascites*), etc.

Basti which requires skill and experience on the part of the *vaidya* is the main part in the treatment of *vata vyadhi*, i.e., disorder of nervous system.

Nasya is a cure for many kinds of headaches and diseases of head and neck. Facial paralysis requires some medication by *nasyakarma*.

Snehana alone is sometimes used in peptic ulcers and nervous disorders. A special type of *snehadhara sweda* used in polio gives very good results. *Pind sweda* is also a special variety of *sweda* which is effective in the treatment of many types of paralysis.

APPENDIX II

Ayurvedic Dispensaries

Taluka	Place	Taluka	Place
1 Jamnagar	Shapar Jam-Vanathli Matva Dhudasia Jambuda Bed Veratia	6 Khambhalia	Movan Bhadthar Vadatra Nagada
2 Dhrol	Bhensdad Jalia Mansar Katda	7 Bhanvad	Shiva Verad Bhangol Pachhtar Gunda
3 Jodiya	Hadiana Bhimkata Pithad Fatsar	8 Jamjodhpur	Satapar Jam-Vali Samana Sadodar Tarsai Sheth Vadala Amrapar
4 Lalpur	Rasangpar Pipartoda Khadkhambhalia	9 Kalyanpur	Lamba Bhatia Bhogat
5 Kalavad	Mota Vadala Kharedi Beraja Navagam Nikava Khandera	10 Okhamandal	Dwarka Nageshwar

CHAPTER XVI

OTHER SOCIAL SERVICES

Social services as now understood are a new phase of public activities which have been assuming greater importance day by day to fulfil the aims and objectives of a welfare state. Activities for the welfare of the common man which existed in former times were limited in extent and operation because the problems under the social, economic and political structure then in existence were few and far between. Under the autocratic form of Government prevalent in the past the State considered itself responsible only for the maintenance of law and order, preservation of peace, and guarding the person and property of the people. The need for social amenities arose with the change of time and the complexity of the social and economic structure brought about by the mechanisation of industry calling for extensive measures for the welfare of workers and disadvantageous classes. Intensive activity in the field of social welfare has been a marked feature of public life since Independence to achieve the goal of the socialistic pattern of society. Government has introduced and implemented various measures for the amelioration of the backward sections of society which were hitherto neglected or exploited and suffered from a number of disabilities. The problem, however, is so vast and extensive that the Government alone cannot achieve the desired results without the active co-operation of the public. Various institutions and organisations functioning in the field of social services have, therefore, been recognised to be the proper agency to bring maximum relief to those who are in need of it because of their intimate contact and association with these classes. This agency has been utilised by Government for the effective implementation of a number of welfare measures which will be reviewed below in brief to give a proper perspective of the efforts made in this direction and results achieved.

LABOUR WELFARE

In the past. need for labour legislation did not arise as there were no labour problems which are the marked features of the modern industrial conditions. With all the complexity of organisation and means of production mechanisation of industries has given rise to numerous problems, which did not exist in the past. In former times, the production of goods was usually confined to the household, where craftsmen worked with the help of family members. Even where hired labour was employed, the relations between the employer and the employee were cordial giving no occasion either for regulating their relations or conditions of work. With the advent of mechanisation, the former handicrafts began to disappear making way for medium and large scale factories employing large number of persons. The former relations

and status of the craftsmen were thus transformed into those of an ordinary wage earner. With the increasing pace of industrialisation and urbanisation, labour problems of vast magnitude began to emerge, as the position of workers became less secure and more hazardous. Such problems as fatal accidents, insecurity of work, insanitary and unhygienic working conditions, slums, unemployment, etc., came to the forefront. Measures regulating the relations of the employer and the employees, ensuring fair wages and raising their social and economic condition were urgently called for to put an end to the exploitation of labour by the capitalist.

Labour Welfare Measures—Since most of the Peninsular States had done but little to ameliorate the working condition of labour, the Government of Saurashtra after the integration of States in 1948 applied itself to the task of organising social services on a uniform basis. The first step in this direction was the enactment of uniform labour legislation in the whole State by applying (1) The Factories Act, 1948, (2) The Industrial Disputes Act, 1947, (3) The Shops and Establishments Act, 1948, (4) The Indian Trade Unions Act, 1926, (5) The Minimum Wages Act, 1948, (6) The Workmen's Compensation Act, 1923, and (7) The Maternity Benefit Act, 1929.

These enactments have brought about important changes in the sphere of industrial relations, wages and social security.

Workmen's Compensation Ordinance—The Saurashtra Workmen's Compensation Ordinance promulgated on 19th July, 1948 was the first important piece of social insurance legislation in Saurashtra based upon the Workmen's Compensation Act of 1923 as amended up to 1946. It assures the disabled workers as well as the dependents of the workers who sustained injuries and died in the course of their work, payment of monetary compensation according to the nature of accident and the average monthly wages earned by the worker. The following statement shows the number of cases registered, decided and pending under the Workmen's Compensation Act, between 1962 and 1966.

Workmen's Compensation

Year	Cases pending at the beginning of the year	Cases instituted	Cases disposed of	Cases pending at the end of the year
1	2	3	4	5
1962	4	15	9	10
1963	10	31	23	18
1964	18	23	29	12
1965	12	42	34	20
1966	20	25	26	19

Source :
Commissioner for Workmen's Compensation (Civil Judge, Senior Division), Jamnagar

The compensation paid to the workers in the district amounted to a total of Rs. 88,232 in 1965.

Trade Unions—Prior to Independence, there was no freedom of association in most of the States of Saurashtra. The growth of the trade union movement was, therefore, seriously handicapped in this part of the country. The Government of Saurashtra, with a view to help the growth of trade unionism in Saurashtra promulgated a Trade Union Ordinance in 1949, embodying the provisions of the Indian Trade Unions Act, 1926 as amended up to date. The Act which has been subsequently amended by the Indian Trade Unions (Amendment) Act of 1964 provides for the registration of trade unions, gives them a legal status and also prescribes their rights and liabilities. The Bombay Maternity Benefit Act, 1929 was adapted by an ordinance on 20th August, 1948. The Act as amended subsequently in 1963 and 1965 regulates the employment of women for certain periods before and after child birth and provides maternity benefit on the basis of average wage for a fixed period of 12 weeks of which not more than 6 weeks should precede delivery. The number of factories to which this Act was applied in Jamnagar district increased from 154 in 1961 to 176 in 1965.

Indian Factories Act and Other Enactments—The Indian Factories Act, 1948, which was made applicable to Saurashtra from 1st April, 1949 lays down the minimum requirements regarding the health, safety and general welfare of workers and fixes their working hours besides providing for specific welfare measures such as rest, shelters, canteens, first-aid appliances, washing facilities, etc. The Industrial Disputes Act, 1947 was applied to Saurashtra by the Saurashtra Government in 1948, to maintain industrial peace. It provides for the settlement of labour disputes through conciliation, adjudication or arbitration. The Conciliation Officers appointed under the Act try to settle the industrial disputes arising in their jurisdiction and where a settlement by conciliation is not possible, the dispute is referred to a Court of Enquiry or Industrial Tribunal for adjudication. The Act imposes restrictions on strikes and lock-outs declared during the pendency of conciliation or adjudication proceedings. The following statement gives an idea of the working of the Industrial Disputes Act in Jamnagar district between 1961 and 1966.

Industrial Disputes, 1961 and 1966

Nature	Cases on record		Cases decided		Cases pending	
	1961	1966	1961	1966	1961	1966
1	2	3	4	5	6	7
(a) Adjudication	9	31	3	6	6	25
(b) Complaints under Section 33-A	14	9	10	1	4	8
(c) Applications under Section 33	2	7	1	2	1	5

Source:

Registrar, Industrial Court, Gujarat State, Ahmedabad

Shops and Establishments Act—The Government of Saurashtra had introduced the Saurashtra Shops and Establishments Act in 1955. It was

repealed in 1962 and the provisions of the Bombay Shops and Establishments (Gujarat Extension and Amendment) Act, 1961 (Act No. XI of 1962) were brought into force in Gujarat State. The Act limits the hours of work in shops and commercial establishments and provides for a paid weekly holiday besides prohibiting employment of any child below 12. The provisions of this Act are made applicable to the municipal areas of the district.

Minimum Wages Act—Wages and social security are the other important spheres where labour legislation has made notable contribution towards the welfare of working classes. Prior to integration, wage fixation was left more or less to the hazard of unequal bargaining between the employers and individual workers. Trade union organisations being weak, collective bargaining was unknown. After the formation of Saurashtra State, a new element was introduced for the first time in the realm of wage settlement. With a view to improve the standard of living of those sections of the working population whose wages were very low, the Government of Saurashtra applied the Minimum Wages Act of 1948 to the State of Saurashtra. The Government appointed committees to recommend minimum wages for certain specified industries in which there was a vast scope for exploitation of labour and fixed minimum wages on the basis of the recommendations made by them. The Minimum Wages Act is at present applied to the following industries in Gujarat : (1) rice, flour, and *dal* mills ; (2) tobacco manufacturing and *bidi* making ; (3) oil-mills ; (4) road construction and building operations ; (5) stone breaking and stone crushing ; (6) public motor transport ; (7) tanneries and leather manufacturing ; (8) hotels, restaurants, and eating houses ; (9) agriculture ; (10) local authorities ; (11) shops and commercial establishments ; (12) printing presses ; (13) cotton ginning and pressing ; (14) bobbin making ; (15) potteries ; (16) power loom ; (17) *jari* making, and (18) salt manufacture. The details about the application of this Act are already discussed in Chapter V—Industries.

Provident Fund—After the formation of the State of Gujarat, the first major enactment for the welfare of workers was the Employees' Provident Fund Act which was introduced in 1961. The Provident Fund Scheme in this district covered till 31st October, 1966, 96 establishments, employing 9,968 persons, 7,811 of whom contributed to the Provident Fund. The statement that follows gives distribution of establishments, employees and subscribers by industry.

STATEMENT XVI.1

Provident Fund Scheme, 1966

Sl. No.	Industry	No. of establishments	No. of employees	No. of subscribers
1	2	3	4	5
1	Electrical manufacturing and general engineering	22	708	496
2	Textiles	3	1,557	1,241

STATEMENT XVI.1—*contd.*

Sl. No.	Industry	No. of establishments	No. of employees	No. of subscribers
1	2	3	4	5
3	Edible oil	32	771	444
4	Tea factory	1	351	8
5	Heavy and fine chemicals	3	2,865	2,644
6	Road motor transport establishments	7	27	19
7	Restaurants	3	52	28
8	Hotel	1	19	2
9	Bauxite mines	3	60	40
10	Crockery	1	10	10
11	Trading and commercial establishments	2	144	132
12	Processing and treatment of wood	2	56	36
13	Plastic and plastic products	2	55	45
14	Club	1	20	14
15	Bone crushing	1	30	25
16	Paints and varnishes	1	23	21
17	Bank	1	107	76
18	Tiles	1	47	26
19	Electricity	1	..	..
20	Cement	2	2,364	2,100
21	Salt	5	600	400
22	Others	1	2	2
	Total	96	9,969	7,911

Source: Regional Provident Fund Commissioner, Ahmedabad

Existing Enactments—Inclusive of the seven enactments discussed earlier, the following is a comprehensive list of important labour laws in force today in Gujarat : (1) The Workmen's Compensation Act, 1923, (2) The Indian Trade Unions Act, 1926, (3) The Bombay Maternity Benefit Act, 1929, (4) The Payment of Wages Act, 1936, (5) The Bombay Industrial Relations Act, 1946, (6) The Industrial Employment (Standing Orders) Act, 1946, (7) The Industrial Disputes Act, 1947, (8) The Employees' State Insurance Act, 1948, (9) The Bombay Shops and Establishments Act, 1948, (10) The Factories Act, 1948, (11) The Minimum Wages Act, 1948, (12) The Employees' Provident Fund Act, 1952, (13) The Working Journalists

(Conditions of Service and Miscellaneous Provisions) Act, 1955, (14) The Gujarat Labour Welfare Fund Act, 1961, (15) The Motor Transport Workers' Act, 1961, (16) The Gujarat Smoke Nuisances Act, 1963, (17) The Payment of Bonus Act, 1965.

Administrative set-up—The Commissioner of Labour working under the Department of Education and Labour is responsible for administering various legislative measures pertaining to labour in the State. He has under him one Deputy Commissioner of Labour, 10 Assistant Commissioners of Labour, (8 at Ahmedabad and 1 each at Baroda and Rajkot), and Labour Officers at the district level. The Assistant Commissioner of Labour at Rajkot has been appointed statutorily as Conciliation Officer under the Industrial Disputes Act and Conciliator under the Bombay Industrial Relations Act for Saurashtra and Kutch areas. His main functions under this Act are to deal with industrial disputes and endeavour to bring about settlement as far as possible. The Labour Officer at Jamnagar is the officer at the district level to ensure that provisions of various labour laws are properly enforced in the district. The Factories Act, Payment of Wages Act, Maternity Benefit Act, and Employment of Children's Act are enforced by the Factory Inspectorate headed by a Chief Inspector of Factories assisted by a Deputy Chief Inspector of Factories and Factory Inspectors at the district headquarters. The Assistant Commissioner of Labour Welfare at Rajkot looks after the welfare activities in this district under the supervision of the Welfare Commissioner, Gujarat Labour Welfare Board, Ahmedabad.

The Industrial Tribunal with headquarters at Ahmedabad has been constituted after the formation of the State of Gujarat. It deals with various cases arising out of Industrial Relations Act and Industrial Disputes Act, as well as under other statutory labour acts. The Civil Judge, Senior Division, Jamnagar, who works as Commissioner for Workmen's Compensation in Jamnagar district is the authority for deciding compensation payable to those workers who have sustained injuries while on duty. The Employees' Provident Fund Act is being administered by the Regional Provident Fund Commissioner, Ahmedabad, appointed by the Central Government.

Labour Welfare Centres—Facilities and other amenities for the workers were totally absent before Independence. Realising the urgency of promoting physical, intellectual and social welfare and affording adequate educational opportunities to the working classes the Government of Saurashtra enunciated measures for industrial workers by opening welfare centres in practically all the industrial towns in the State. There are two such centres in the district, both in Jamnagar city. These centres provide various recreational and instructional facilities to the workers and their dependents in order that they can utilise their leisure time in a better way. The facilities provided at these centres include indoor and outdoor games, reading-room

and library, radio and musical entertainments, sewing, knitting and embroidery classes, women's welfare activities and other activities of a corporate nature such as celebration of festivals, dramatic performances, exhibitions, games, competitions, debating societies, etc.

Industrial Housing—Under the subsidised industrial housing scheme sponsored by Government, 500 tenements at Jamnagar and 60 tenements at Sikka were constructed at a total cost of Rs. 1,483,400 during the Second Five Year Plan. In the Third Plan period 256 tenements were constructed at Jamnagar at a total cost of Rs. 985,000. Further details of the scheme are given in Chapter V—Industries.

PROHIBITION

Prohibition did not exist either in the Nawanagar State or in any other State in Saurashtra except in the State of Bhavnagar. After the formation of the State of Saurashtra, the new Government took up the most important problem of introducing prohibition in the State, in consonance with the directive principles of the Constitution. As soon as conditions permitted, Government introduced total prohibition in the entire State by applying the Bombay Prohibition Act, 1949 with effect from 1st April, 1950.

The State of Gujarat, of which Jamnagar district forms a part, is governed by the Bombay Prohibition Act, 1949 The import, export, transport, purchase, possession, use, consumption and manufacture of intoxicants are prohibited in the State except under a licence or a permit. The Act, however provides for the grant of permits for the possession, use and consumption of foreign liquor by foreigners, tourists, privileged personages, visitors and those requiring liquor either for medical purposes or on grounds of health. The manufacture, sale, consumption, etc., of country spirit is not permitted except for sacramental purposes. Permits for sacramental wine required by Jews, Christians and Parsis for religious purposes are granted in accordance with the provisions of the rules made in this behalf. Licences and permits for the possession and use of alcohol for industrial, educational, medical and research purposes are also granted. The laws relating to prohibition in force in Gujarat State are . (1) Bombay Prohibition Act, 1949; (2) Bombay Opium Smoking Act, 1936 ; (3) Bombay Drugs (Control) Act, 1959 ; (4) Dangerous Drugs Act, 1930 ; (5) Medicinal and Toilet Preparations (Excise Duties) Act, 1955 ; and (6) Spirituous Preparations (Inter State Trade and Commerce) Control Act, 1955.

Objectives and Working of Prohibition Laws—The legislation in respect of prohibition is brought into force primarily with a view to eliminate the drink and drug vice from the State. It also aims at raising the standard of living of the people besides rehabilitating the home life of the addicts.

The work of enforcement of prohibition is entrusted to the police in the district in addition to their other normal duties. After the introduction of Panchayats Act in 1963, the State Government has constituted a District Prohibition Committee to advise the district administration in the matter of grant of licences under the Bombay Prohibition Act, 1949. The work relating to prohibition propaganda has also been transferred to the Panchayats. The social welfare committees of the District and Taluka Panchayats and the education committees of the Village Panchayats now look after prohibition propaganda within their respective jurisdiction. The District Prohibition Committee also co-ordinates the activities of Panchayats, Prohibition and Police Departments.

Prohibition Offences—The number of offences detected in the district during the year 1964-65 was 271 of which 104 related to liquor, 8 to hemp drugs and 4 to illegal import of opium. The cases detected were mainly for illicit distillation, possession or for other miscellaneous offences against the Abkari laws. 155 cases of convicted drunkenness were recorded in the district during that year. Prohibition offences recorded in the district between 1960 and 1965 are given in the following statement.

Prohibition Offences

Liquor	1960-61	1961-62	1962-63	1963-64	1964-65
1	2	3	4	5	6
Illicit distillation and possession of implements ..	39	50	44	41	47
Illicit possession, importation, exportation, and transportation	47	95	47	48	57
Drunkenness	101	91	108	99	156
Others	17	12	..	..	..
Hemp drugs	10	9	12	14	8
Opium	8	13	5	6	4
Total ..	222	270	216	208	271

Source :
Director of Prohibition and Excise, Gujarat State, Ahmedabad

Benefits of Prohibition—The beneficent effects of 17 years of prohibition are now visible in the general welfare of the people. The release of extra purchasing power in their hands has enabled a large number of persons who were affected by the vice of drink to repay their old debts and take up profitable pursuits in agriculture and industry. Unanimous resolutions thanking the Government for its policy of prohibition and saving the society from the scourge of drink-evil have been passed during the last few years by

the members of Backward Classes in the State. The efficiency and economic condition of industrial workers have improved appreciably. Prohibition has also resulted in lesser family tension, cordial relations at home and general peace and goodwill among those classes of people who were once noted for drinking and misbehaviour. It has thus proved to be not only a social reform but an important achievement as well by bringing about social and economic betterment of the addicts who mostly belong to the backward strata of society.

Administrative Set-up—The administrative head of the Prohibition and Excise Department, Gujarat State is designated as the Director of Prohibition and Excise, who has his office at Ahmedabad. The Inspector of Prohibition and Excise at Jamnagar carries out the departmental work at the district level. The duties of the district level officers are to administer laws regarding prohibition and excise, to issue licences and permits and to collect excise on liquor and alcoholic medicines. They also carry out prohibition propaganda in the municipal areas of the district. In other areas this work is done by the Panchayat.

BACKWARD CLASSES

There are certain sections of population in every part of the country who because of geographical, social or economic factors have not been able to establish or maintain relations or contacts with other sections of society and in the result have not been able to get benefit of various developmental activities formulated by the Government. Their educational progress is slow and their way of living differs from that of others. They are backward socially as well as economically. Some of the castes suffer from the bane of untouchability, some live in forest or *nes* areas, while still others live a nomadic life, and are sometimes engaged in anti-social activities. They are deprived of the direct advantages of various welfare activities of the Government because of their isolation and various handicaps from which they suffer.

Advancement of Backward Classes—Prior to the formation of the State of Saurashtra, the Scheduled Classes suffered from many disabilities as in the rest of the country. The untouchability complex prevailed among caste Hindus to a large extent inspite of the efforts of social and political workers. The social disabilities were accompanied by wide economic and cultural disabilities, each reinforcing the other. Opportunities for betterment were practically denied Other Backward Classes, though economically and culturally backward, did not suffer from these disabilities to the same extent.

After Independence, the Saurashtra Government took concerted measures for ameliorating the condition of Backward Classes. It set apart a sum of Rs. 38·98 lakhs for their social and economic regeneration in the

First Five Year Plan. Lands were given to these classes at nominal or no price, and loans advanced for construction of houses. Public wells for drinking purposes were constructed to meet this essential need of the rural and backward population. Private agencies were provided with subsidies to undertake construction or extension of hostels to accommodate backward class students. The Government also accorded priority to Harijans in the allotments of waste lands for cultivation. A Co-operative Harijan Housing Association was formed to tackle the problem of housing for Harijans by providing long term interest-free loans for construction of houses either on individual or co-operative basis.

Immediately on coming into power the Saurashtra Government issued the Saurashtra Harijan (Removal of Social Disabilities) Ordinance in 1948, whereunder all Government educational institutions and public places such as hotels, theatres, public wells and conveyances were thrown open to Harijans. The original ordinance applied only to seven castes. In order to make it applicable to all the fifteen castes classed as scheduled in Saurashtra under President's Order, the Saurashtra Government modified the Ordinance in 1950-51[1]. But the removal of social and economic backwardness of the Scheduled Castes and Tribes required a far reaching and comprehensive programme of development rather than mere social legislation. A Backward Class Investigation Committee was, therefore, appointed in March, 1948 consisting of nine members under the chairmanship of Shri Chhaganlal Joshi, a veteran Harijan worker. The committee submitted its report in May, 1950. It divided Backward Classes into three groups, Scheduled Castes, Scheduled Tribes and other backward communities which included nomadic and denotified tribes. The former two were in accordance with the policy laid down by the Government of India, whereas the third was a special classification, devised in view of the special conditions prevalent in Saurashtra.

The condition of Harijans has improved considerably both economically and socially in recent times as a result of intensive work done by social workers and of various legislative measures taken by Government to ameliorate their condition. In addition to these enactments which are in force in Gujarat, activities designed to bring home to the general public the evils of untouchability are also undertaken by the celebration of Harijan week, award of prizes to villages doing outstanding work in the removal of untouchability, grant-in-aid to voluntary agencies working for the eradication of untouchability, etc. The general attitude of the people towards Harijans has also changed for the better, more so in towns than in villages. They are treated on par with other members of society in public functions or places

1 The Bombay Harijan Temple Entry Act, 1947, Untouchability Offences Act, 1955 and Bombay Hindu Places of Public Worship Entry Authorisations Act of 1956 are now in force in the State and the district.

of entertainment. Their children are now admitted without discrimination to schools and colleges. They can get the highest position in the State and public bodies. In fine, they are being gradually accepted in society on the basis of social equality and the former handicaps from which they suffered are slowly but surely disappearing. Their housing condition has appreciably improved as a result of various schemes sponsored by the Government and local self-governing bodies. As will be seen later, their economic condition is also improving due to various concessions given by the State to overcome the handicaps from which they suffered in the past.

The following castes in the district are notified as scheduled under the President's order: (1) Bawa (Dhed) or Dhed Sadhu (2) Bhangi or Rukhi (3) Chamadia (4) Chamar, Nalia or Rohit (5) Dangashia (6) Garoda (7) Garmatang (8) Hadi (9) Meghwal (10) Senva (11) Shemalia (12) Thori (13) Turi (14) Turi-Barot or Dhed-Barot and (15) Vankar Dhed or Antyaj. Those classified as Scheduled Tribes in Jamnagar district are Rabari, Bharvad and Charan residing in *nes* areas of Alech and Barda forests and the Siddis. Mers and Vaghers are included under denotified tribes, while Kolis and Ahirs are considered as other backward classes for the purposes of recruitment to Government services. The predominant Scheduled Castes or Harijans in the district are Meghwal (25,589), Vankar including Dhed or Antyaj (9,648), Chamar including Nalia or Rohit (8,402) and Bhangi or Rukhi (3,618).

The total population of Scheduled Castes in the district according to 1961 Census is 50,295 (35,171 rural; 15,124 urban) who form 6·07 per cent of the total population of the district. The working population accounts for 20,557 persons or 40·87 per cent of their population in Jamnagar district. Workers in such occupations as (i) tanning and currying of hides and skins and (ii) scavenging numbered 1,101 (2·19 per cent) and 741 (1·47 per cent) respectively of the total population of Scheduled Castes in the district. The main Scheduled Tribe in the district is the Rabaris residing in the forest areas of Barda and Alech who claim 2,406 or only 0·29 per cent of the total population of the district and 0·08 per cent of the Scheduled Tribes of the State. Their working population which accounts for 1,211 persons or 50·33 per cent of their population in the district is engaged in cattle breeding and at household industry.

Saurashtra Backward Classes Board—Backward Class communities as a rule share the benefits accruing from the general development programme of the State and the country. But in view of their isolation and various handicaps from which they have been suffering for long, it has been necessary to supplement the general programmes by special measures for their welfare and uplift. With a view to formulation and speedy implementation of schemes for the social and economic amelioration of these

disadvantageous classes, one of the most outstanding steps taken by the Government of Saurashtra was to constitute a statutory body called the Backward Classes Board. The Board worked as a corporate body consisting of 8 members, 7 of whom were public workers. Its main functions were to provide information relating to the grievances and needs of Backward Classes to the Government, to form a channel of communication between the department and Backward Classes, to give loans and subsidies, promote co-operative societies among them, and take suitable measures for the removal of social disabilities and harmful customs affecting them. The Board continued to function even after the formation of the composite State of Bombay till the year 1959. The various schemes for the welfare of Backward Classes formerly entrusted to the Board are now implemented in the district through the agency of the District Backward Class Officer working under the control of the District Development Officer who is the chief administrative officer of the District Panchayat.

Welfare Schemes—The schemes for the welfare of Backward Classes can broadly be classified into measures for (a) educational and cultural uplift, (b) economic uplift, and (c) health, housing and others.

Educational and Cultural Uplift—Out of a total expenditure of Rs. 2·99 lakhs incurred in the district for the welfare of Backward Classes during the Third Plan period, an amount of Rs. 1·55 lakhs was spent after educational and cultural uplift. Since education remains the sheet-anchor of the progress of the people, Government has all along been giving due consideration to the need for promoting education amongst the Backward Classes. By and large, State assistance consists of payment of tuition fees, examination fees and lumpsum stipends for books and scholarships to primary, high school and post-S. S. C. students. The State also gives grants for the construction of hostels for backward class students.[1]

Measures for Economic Uplift—A majority of Backward Classes are either agriculturists and landless labourers or artisans. Since their agricultural condition can be improved only through schemes which have a direct bearing on their economic activity, the programme for their economic uplift is covered by the following schemes :

(i) Agricultural schemes

(ii) Financial assistance to cottage industry and professions

(iii) Financial assistance to co-operative societies

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1. Details of these schemes will be found in Chapter XIV—Education and Culture.

Most of the agricultural schemes are [illegible] of Backward Class Welfare, but two of them, namely, reclamation of land and contour bunding being of a technical nature are executed by the Agriculture Department.

Under the schemes relating to agriculture, financial assistance consisting of 50 per cent of the total by way of subsidy and 50 per cent by way of loan is given to all backward class people for purchase of oil pumps and engines, agricultural implements, bullocks, bullock carts, etc., and for minor irrigation purposes. A grant of Rs. 400 per acre for land improvement and Rs 40 per acre for contour bunding is also offered. Under another scheme loans and subsidies subject to a maximum limit of Rs. 500 per individual are granted to all backward class members for starting cottage industries and professions like tailoring, carpentry, weaving, toy making, etc. Training-*cum*-production centres are run for Scheduled Castes and Scheduled Tribes where they are imparted training in various technical courses. An Industrial Home known as Shri Gandhi Udyog Mandir is run at Jamnagar where the trainees are given free lodging and boarding facilities. To save the Backward Classes from exploitation by money-lenders, traders and contractors, they are encouraged to form co-operative societies by giving liberal financial assistance.

Health, Housing and Others—Under this category there are five schemes meant for Scheduled Castes only, viz., construction of drinking water wells, medical aid, eradication of the practice of carrying night soil as headload, provision of house sites and subsidy for housing of sweepers and scavengers. The special schemes for Scheduled Tribes include construction of roads, bridges and culverts in tribal areas and establishment of subsidiary health units. Under a scheme meant for other Backward Classes, various types of co-operative societies are given financial assistance for share capital, management, tools and equipments. Under another scheme, people belonging to nomadic tribes are given training for learning and practising tailoring. Grant to the extent of 75 per cent of the total expenditure is also given for the construction of their own houses. "Planning and Co-ordination Cell" for Scheduled Tribes is a special scheme under which statistics relating to their population, literacy, employment, etc., are maintained for evaluating the progress in planning. Free legal assistance is given to Scheduled Castes and Tribes in criminal and civil proceedings, as it was found that due to their poor economic condition they were not able to go to the court of justice to protect their rights.

Social Equality—Before Independence, social welfare activities were restricted to some constructive workers, a few service-minded societies and missionaries, and no special efforts were made by the Government or the public at large for the amelioration of the Backward Classes. It was

Mahatma Gandhi who awakened the social conscience of this country by stressing the need and urgency of promoting the well-being of those disadvantageous classes, which had been hitherto neglected and subjected to social tyranny. The Government of the day also felt the need for initiating measures for their uplift and amelioration and opened the Backward Classes Department in 1932.

The directive principles of State policy lay down that the State shall promote with special care the educational and economic interests of the weaker sections of the people, and of the Scheduled Castes and the Scheduled Tribes in particular, and shall protect them from social injustice and all forms of exploitation. The Fundamental Rights embodied in the Constitution enjoin abolition of untouchability and forbid its practice in any form. The enforcement of any disability arising out of 'untouchability' has been made penal. To ensure equality of opportunity for all citizens in matters relating to employment, it has been laid down that no citizen shall, on grounds only of religion, race, caste, sex, descent, place of birth, residence or any of them, be ineligible for, or discriminated against, in respect of any employment or office under the State. It is now amply recognised that nobody becomes an untouchable by birth or on account of his following a particular avocation. The prevalence of untouchability is an evil that divides society and tends to retard its development.

Reservation of Seats for Backward Classes in Government Service—After Independence, the United State of Saurashtra with a view to remedy the inadequacy of representation of Backward Classes in Government services, passed an Order in 1949 laying down the following percentage of recruitment in the following cadres, subject to their possessing the requisite qualifications at the time of recruitment.

Cadre 1	Percentage of recruitment 2	Percentage up to which Cadre must be filled by B. C. personnel by recruitment as in Col.2 3
Clerks ..	10	5
Talatis ..	30	10
Baillifs ..	10	10
Teachers ..	15	15
Peons ..	20	10

Government also ordered relaxation of the prescribed age limit up to 3 years in view of their general backwardness.

In 1953 the Government of Saurashtra revised its earlier orders of 1949, and fixed the following percentages of seats in Government services for the Backward Classes subject to their possessing the prescribed minimum qualifications :

For the Scheduled Castes and Scheduled Tribes taken together :

(a) 5 per cent of the vacancies in all categories advertised through the Public Service Commission,

(b) 10 per cent of other vacancies in all other categories except Class IV posts, and

(c) 6¼ per cent of Class IV posts.

For Other Backward Classes :

(a) 6¼ per cent of Class IV posts

Government also increased the relaxation of age up to 5 years.

After the integration of Saurashtra into the Bombay State in 1956, the Government of Bombay fixed in 1959, the following minimum percentage, for the reservation of seats for Backward Classes in Saurashtra region :

1. (a) Vacancies advertised through the Public Service Commission in Class I, II and III services.

(i) Scheduled Castes (ii) Scheduled Tribes	5 per cent (For each category of services)

(b) All other vacancies in Class I, II and III services.

(i) Scheduled Castes	10 per cent
(ii) Scheduled Tribes	(For each category of services)
(iii) Other Backward Classes	Nil

2. Class IV services :

(i) Scheduled Castes	6¼ per cent
(ii) Scheduled Tribes	6¼ per cent
(iii) Other Backward Classes	6¼ per cent

Relaxation of age up to 5 years was continued as hithertofore. These concessions have been continued also by the Government of Gujarat since its formation in 1960

Administrative Set-up—Before the introduction of the Panchayati Raj in 1963, activities for the welfare of Backward Classes were conducted by the Social Welfare Department which had under it a special Backward Class Welfare Wing. The departmental head was designated as the Director of Social Welfare who had under him in his office a Deputy Director, a Personal Assistant, one Officer-in-Charge of Backward Class and Tribal Welfare and two Social Welfare Officers in addition to District Social Welfare Officers at the district headquarters. This position was radically changed on account of the introduction of the Panchayati Raj with effect from 1st April, 1963 when almost all the welfare schemes of non-technical nature were transferred to District Panchayats with necessary staff. Thus every District Panchayat in the State (except Dangs district) was allotted the post of Social Welfare Officer to implement various welfare schemes in the Panchayat areas. As the work of implementation of welfare schemes for Backward Classes in municipal areas was not transferred to the District Panchayats, a separate machinery was created for the purpose and six offices of Welfare Officers (State) as distinguished from those under the Panchayats were opened in municipal areas of the State with their headquarters at Ahmedabad, Mehsana, Surat, Baroda, Amreli and Rajkot. The Social Welfare Officer (State) at Rajkot was in charge of Rajkot, Jamnagar, Surendranagar and Kutch districts.

In January 1965, the Backward Class Welfare Wing was separated from the Directorate of Social Welfare and became an independent Directorate of Backward Class Welfare. The Social Welfare Officers at district level were also redesignated as Backward Class Welfare Officers. The Director of Backward Class Welfare is assisted by a Deputy Director, an Officer-in-Charge of Tribal and Backward Class Welfare, and two Backward Class Welfare Officers in his office besides two Statistical Officers. The Nomadic Tribes Welfare Officer is specially charged with the duties to look after the welfare of the nomadic tribes at the State level whose office is located at Ahmedabad.

Public Trusts and Charitable Endowments

It is evident from the available historical records that supervision over the affairs of public institutions of religious and charitable nature is not a modern phenomenon. Atleast from 300 B. C. onwards the state authorities have been found to have interested themselves in the affairs of religious and charitable institutions and exercised supervision and control over them besides providing means for their maintenance and upkeep. But there was no centralized supervision over public trusts in the State.

Central and State legislations for state supervision over public trusts enacted in the former Bombay State were the Bombay Public Trusts Registration Act, 1935 applicable to public trusts existing for the benefit of Hindu community; the Musalman Wakf (Bombay Amendment) Act, 1935

applied to Muslim Wakfs only and the Parsi Public Trusts Registration Act, 1936, looked after public trusts existing for the benefit of the Parsi community. The central enactment applicable to all the public trusts in the State were the Charitable and Religious Trusts Act, 1920, and the provisions of Sections 92 and 93 of Civil Procedure Code.

Before Independence, the machinery for exercising supervision and control varied according to the communities for whose benefit these trusts were created. In 1950, the Bombay Legislature passed the Bombay Public Trusts Act, 1950, with a view to introduce uniformity in their supervision. The public trusts in Jamnagar are at present governed by this Act which has many new features. Unlike the previous enactments on the subject, it applies to all communities, in keeping with the principles laid down in the Constitution about the uniformity of civil laws, and provides for a uniform machinery for exercising supervision and control by the State over the management of public trusts. The definition of 'Public Trusts' has been widened so as to include the societies registered under the Societies Registration Act, 1860. The Act defines a public trust "as express or constructive trust for either a public, religious or charitable purpose or both and includes a temple, a *math*, a *wakf*, a *dharmada* or any religious or charitable endowment and a society formed either for a religious or charitable purpose or for both and registered under the Societies Registration Act, 1860." The Act provides for the establishment of special machinery for dealing with all matters concerning the administration and management of public trusts, and working under the administrative control of the Legal Department. It provides for compulsory registration of all public trusts and for the appointment of a Charity Commissioner for the State and Deputy and Assistant Charity Commissioners for regions and sub-regions into which the State is divided for administrative convenience. Jamnagar district which forms part of the Rajkot region is looked after by the Deputy Charity Commissioner, Rajkot. The total number of trusts registered in the district till October, 1966, were 1,537; Hindu—1,100, Muslim—244 and others 193. Some of the important public trusts in the district are listed below.

(1) The Shardapith, Dwarka, (2) Shri Dwarka Devasthan Samiti, Dwarka, (3) Shri Dwarkadhish Temple Trust, Beyt, (4) Satya Kabir Saheb Trust, Jamnagar, (5) Sheth Bhagwanji Karamshi Charity Trust, Jamnagar, (6) Shri Halai Visha Oswal Tapagachha Upashraya and Dharma Sthanak, Jamnagar, (7) Madresa Taheriya Committee Trust, Jamnagar, (8) Shri Anandabava Seva Sanstha Trust, Jamnagar, (9) Shri Meghji Pethraj Shah Charitable Trust, Jamnagar and (10) Shri Jamnagar Panjrapole, Jamnagar.

Shardapith, Dwarka—The Shardapith at Dwarka is one of the four seats or *maths* established by Adya Shankaracharya to carry out religious activities in Western India. There are two separate public trusts in the Shardapith.

(i) Shri Laxmi Bhandar Trust, and (ii) Shri Sharda Math Trust. The former was registered as a public trust in 1955 and the latter in 1956. The Laxmi Bhandar Trust looks after the management of Shri Trikamji Temple, Shri Laxmiji Temple and other small temples at Dwarka. Shri Sharda Math Trust has organised an education society known as Shri Shardapith Vidyasabha at Dwarka which runs a number of religious and educational institutions including an Arts College and a Sanskrit Academy which carries out research and prepares scholars for the degree of Ph. D. in Sanskrit and Indology. The Trust having total assets of Rs. 1·34 lakhs possesses landed property in different parts of Gujarat. The present Shankaracharya Shri Abhinav Sadchidanand Tirth Maharaj is the sole and only trustee of both these trusts.

Shri Dwarka Devasthan Samiti, Dwarka—The famous temple of Dwarkadhish at Dwarka is managed by Shri Dwarka Devasthan Samiti. The Samiti is headed by the Mamlatdar at Dwarka and includes one representative each of (i) Dwarka Nagar Panchayat, (ii) the Temple Priest and (iii) Shri Shankaracharya, in addition to two citizens of Dwarka and the Sub-Treasury Officer. The Collector supervises over the finances of these institutions and the State Government frames schemes and rules for its administration as the sole trustee. Prior to 1954, the management of the temple was in the hands of Shri Dwarka Devasthan Samiti appointed by Baroda State in 1907. The trust has a total fund of Rs. 96,000.

Shri Dwarkadhish Temple Trust, Beyt—Shri Dwarkadhish Temple Trust, Beyt, is a Hindu trust established before Independence during the Baroda State regime and registered in 1954. It has a total fund of over Rs. 4 lakhs mostly invested in Government securities. The trust works for the purpose of propagating religious activities, feeding cows and beggars and manages a number of temples, all of which are situated at Beyt-Dwarka. The trust owns landed property giving a yearly income of Rs. 1,000.

Satya Kabir Saheb Trust, Jamnagar—Satya Kabir Saheb Trust was registered at Jamnagar in 1964. It conducts the affairs of the Kabir Ashram and engages itself in religious activities for the propagation of Sant Kabir's preachings. Its assets in Jamnagar amount to over Rs. 3·5 lakhs.

Sheth Bhagwanji Karamshi Charity Trust, Jamnagar—Sheth Bhagwanji Karamshi Charity Trust, Jamnagar, was established at Jamnagar in 1942. It has a total reserve fund of over Rs. 1·5 lakhs. The trust offers scholarships to students, runs a public charitable dispensary at Jamnagar and feeds mendicants. The trust is managed by a committee of trustees.

Shri Halai Visha Oswal Tapagachha Upashraya and Dharma Sthanak, Jamnagar—Shri Halai Visha Oswal Tapagachha Upashraya and Dharma

Sthanak is a Jain trust which works for the propagation of Jain religion and manages the *upashraya* and the *derasar* at Jamnagar. It is managed by a committee of trustees. Registered as a public trust in 1962, it has total assets amounting to Rs. 1·56 lakhs.

Madresa Taheriya Committee Trust, Jamnagar—Madresa Taheriya Committee Trust at Jamnagar is an old Muslim trust established in 1924 and registered as a trust in 1962. Mainly devoted to educational purposes it offers scholarships to Daudi Vohra students and runs two Muslim schools and a Balmandir. It also runs a dispensary at Jamnagar. Its total assets are worth about Rs. 3·5 lakhs.

Shri Anandabava Seva Sanstha, Jamnagar—Shri Anandabava Seva Sanstha, Jamnagar is a Hindu trust working for the service of humanity. It was registered as a public trust in 1962. It runs a high school, a Sanskrit *Path-shala* and a dispensary and manages the Anandabava Samadhi Mandir and the Ramprasad Maharaj Mandir at Jamnagar. It also runs a *sadavrat* in Jamnagar city. Other institutions managed by Shri Anandabava Seva Sanstha include a dormatory at Dwarka and a boarding house for students at Kashi. (For details, see Chapter XVII—Public Life and Voluntary Social Service Organisations). It has total assets of about Rs. 5 lakhs.

Shri Meghji Pethraj Shah Charitable Trust, Jamnagar—Shri Meghji Pethraj Shah Charitable Trust was established in Jamnagar in 1949. It patronises educational institutions, offers a number of scholarships and devotes its fund to charitable activities in Gujarat. It has a total fund of about Rs. 18 lakhs.

Shri Jamnagar Panjrapole, Jamnagar—Shri Jamnagar Panjrapole was registered as a Hindu trust in 1965. Mainly devoted to activities for the protection of cows, it manages a *panjrapole* and a *gaushala* at Jamnagar. Its assets amount to nearly Rs. 3 lakhs. The trust receives large donations from the public.

CHAPTER XVII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

Public Life

Public life in this part of the country was not organised as it is today; nor was there any noteworthy effort on the part of the rulers to encourage public opinion or public participation in the affairs of the State. Public life in Nawanagar State had not developed to any appreciable extent, as the rulers were firm believers of hereditary kingship. Agencies and institutions through which the public could express their opinions and discuss their problems were few. In 1919, Jam Ranjitsinhji formed an Advisory Council which was a consulting body nominated by the ruler for inviting advice and opinion of nominated officials and non-officials. The rulers had no good opinion about the capacity of their people to elect their own representatives. While addressing the first meeting of the Advisory Council in 1919 Jam Ranjitsinhji had observed, " I do not desire to announce paper constitutions carrying high sounding denominations like the 'Representative Assembly'; that would be misleading the public and a dishonest endeavour to curry popular favour. I dislike any such sham. Our people are still backward in education. They have yet to learn and advance a good deal.................. For these reasons, I think it convenient to invite advice and opinion on public matters from councillors carefully selected and nominated."[1] The decision whether such advice or opinion can be adopted or not rested with the ruler himself who was the sole guardian of his subjects. There was thus a total absence of organised public opinion on any appreciable scale.

When the democratic influences came to be felt during the early part of the 20th century in the neighbouring areas under the British administration, the princely States for the most part remained unaffected, as it was the policy of the Indian National Congress, the main political party in the country, not to interfere in the affairs of Indian States. Public opinion became properly organised and vocal only recently, especially after Independence. The fundamental rights guaranteed in the Constitution encouraged people to express their views freely on matters political and others. People began to realise slowly and gradually the importance of their own views and decisions in the democratic set-up of the State. The first popular elections were held in this region in 1948 on the basis of opportunities to all the citizens aged 21 years and above when all sections of the people irrespective of sex, caste or

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1. *Administration Report of the Nawanagar State*, 1918-19

religion exercised their right to vote and elect their own representatives to the Saurashtra Constituent Assembly. Then followed the General Elections of 1952. The introduction of the Panchayati Raj in 1963 went a step further as it enabled the village people to manage their own affairs and actually participate in the implementation of the various development schemes.

REPRESENTATION OF THE DISTRICT IN THE STATE AND THE UNION LEGISLATURES—The district had one Parliamentary single member constituency in the General Elections of 1952, 1957, 1962 and 1967. It was named 'Halar' in 1952 and 1957 elections and 'Jamnagar' in 1962 and 1967 elections. As regards State Legislature, the district had nine single member constituencies when the Saurashtra State Legislative Assembly was in existence in 1952. After the merger of Saurashtra with Bombay at the time of the General Elections of 1957, this district had five single member constituencies in the Bombay State Legislative Assembly. After the bifurcation of the Bombay State at the time of the General Elections of 1962 the district had six single member constituencies in the Gujarat Vidhan Sabha or the State Legislative Assembly. The district was allotted one more assembly constituency in 1967 General Elections with the result that the district at present has seven representatives in the State Legislature and one representative in the Union Parliament (*Lok Sabha*). The details of the territorial extent of the Parliamentary and Assembly constituencies are given below.

*Delimitation of Parliamentary and Assembly Constituencies**

Sl. No.	Name of Constituency	Extent of Parliamentary/Assembly Constituencies
1	2	3
		A—PARLIAMENTARY CONSTITUENCIES
1	Jamnagar ..	Jodiya, Jamnagar, Alia, Kalavad, Jamjodhpur, Khambhalia and Dwarka
		B—ASSEMBLY CONSTITUENCIES
1	Jodiya ..	Jodiya and Dhrol talukas and Vanthali circle in Jamnagar taluka
2	Jamnagar ..	Ward Nos. 1 to 4 and 6 of Jamnagar city
3	Alia ..	Jamnagar taluka (excluding wards Nos. 1 to 4 and 6 of Jamnagar city and Vanthali circle)
4	Kalavad ..	Kalavad and Lalpur talukas
5	Jamjodhpur	Jamjodhpur taluka and Bhanvad circle in Bhanvad taluka
6	Khambhalia	Khambhalia taluka and Bhanvad taluka (excluding Bhanvad circle)
7	Dwarka ..	Kalyanpur and Okhamandal talukas

* *The Gujarat Government Gazette*, Vol. VII, No. 13, Part IV-C, dated 31st March, 1966

POLITICAL PARTIES AND ORGANISATIONS—Congress, Swatantra, Praja Socialist, Jan Sangh and Janata Parishad are the main political parties in the district. A study of the election results of 1952, 1957, 1962 and 1967 shows the relative hold of the political parties in the district. In the first General Elections of 1952, five political parties, viz., Congress, Khedut Sangh, Praja Socialist, Hindu Mahasabha, Kisan Mazdoor Praja Party and an independent candidate contested the elections. Out of the nine seats in the Saurashtra Legislative Assembly, Congress got eight seats and one went to the independent candidate. The strength of the electorate was 263,384 of whom 115,848 or 43·98 per cent of the voters went to the polls. The Parliamentary seat was captured by the Congress candidate uncontested.

In 1957, there was a straight fight between the Congress and the independents as there was no other political party contesting the elections. All the five seats in the Bombay Legislative Assembly were secured by the Congress, one of them uncontested. In the upper house called the Bombay Legislative Council, Jamnagar district had one seat filled in by a representative of the local bodies. The Parliamentary seat was retained by the Congress. The strength of voters was 297,478 of whom 85,722 or 28·82 per cent exercised their franchise. The voting percentage was considerably less than that in the previous elections.

In the General Elections of 1962, as many as seven political parties contested the elections besides four independent candidates. The parties were Congress, Praja Socialist, Jansangh, Gujarat Janata Parishad, Hindu Mahasabha, Swatantra, and Republican. Out of six seats available to the district in the State Legislature, the Congress party captured five and one went to an independent candidate. The Parliamentary seat was again retained by the Congress. The total strength of the electorate was 368,967 of whom 146,813 voters exercised franchise, the percentage of voting being 39·79, appreciably higher than the previous one.

In the last General Elections of 1967, the contesting parties included Congress, Swatantra, Gujarat Janata Parishad and Praja Socialist. The main contest was, however, between the Congress and Swatantra parties. The Parliamentary seat was captured for the first time by the Swatantra party. Of the seven assembly seats, Congress captured three and Swatantra four. As many as 231,351 voters out of the total of 414,134 exercised their franchise establishing an all-time record voting percentage of 55·86. The growing awareness on the part of the citizens of their role in a democratic set-up is thus amply reflected in the overall increase in the percentage of voting during the last General Elections in the district.

The following statement gives the total number of votes polled during each of the four General Elections in the Central and State Legislatures.

House of the People (Lok Sabha)

Election Year	Congress: Votes polled	Congress: Percentage to total votes secured	Other parties: Votes polled	Other parties: Percentage to total votes secured
1	2	3	4	5
1952	(UNCONTESTED)			
1957	90,914	75.41	29,647	24.59
1962	122,628	71.67	48,476	28.33
1967	98,603	44.78	121,572	55.22

State Legislative Assembly

Election Year	Votes polled	Percentage to total votes secured	Votes polled	Percentage to total votes secured
1952 (Saurashtra State) ..	75,459	65.14	40,389	34.86
1957 (Bombay State) ..	60,141	70.16	25,581	29.84
1962 (Gujarat State) ..	85,746	58.40	61,067	41.60
1967 (Gujarat State) ..	84,762	39.26	131,118	60.74

The growing strength of opposition parties will be evident from these statistics.

NEWSPAPERS—No daily newspaper was published from the district before 1964. From May, 1964 a Gujarati daily *Nobat* was started from Jamnagar. It has a limited circulation of about 2,000 copies within the district. The three Gujarati dailies of Rajkot, namely, *Jai-Hind*, *Phoolchhab* and *Nutan Saurashtra* have a wide circulation in this district. The other dailies which include *Sandesh*, *Gujarat Samachar* and *Jansatta* of Ahmedabad and *Mumbai Samachar*, *Janmabhumi* and *Jan Shakti* of Bombay also are in a fairly good demand. Among the English dailies *The Times of India*, *The Indian Express*, *The Western Times* and *The Gujarat Herald* all of which are now published from Ahmedabad are popular among the educated readers. *The Economic Times* and *The Financial Express* have a limited circulation confined to Jamnagar city. A number of periodicals dealing with cultural, literary and other activities published in the district are discussed in Chapter XIV—Education and Culture.

Voluntary Social Service Organisations

ORIGIN, GROWTH AND DIRECTION—The humanitarian urge to organise voluntary associations to meet the needs of social and cultural upliftment of the people is innate. This urge has found greater scope of expression after Independence as a result of popular awakening and State encouragement in

various fields of public activity. Social service in the past was voluntary but not organised in the modern sense of the term functioning through separate organisations and institutions established for specific purposes. It was spontaneous and made available by the ruler and the well-to-do to meet the exigencies of the time and needs of the people. This particularly happened during the time of calamities like famine or scarcity which often visited the district. Special arrangements were made by the leaders of various communities such as Bhatiyas, Lohanas, Baniyas, Khatris, etc., to provide relief to their caste fellows as also to the general public. Special funds like Ram Raksha Fund, the Bhatiya Volunteer Corps Fund, etc., were also organised to administer relief on such occasions.

Voluntary social service organised by concerted public efforts is thus a recent phenomenon closely associated with the democratic forms of Government promising equal status and opportunities to all sections of society. The field of social service is one where state efforts must be supplemented by close and intensive public co-operation to ensure quick results in the working of various schemes sponsored by Government. The welfare of the handicapped and disadvantageous section of society like women, children, the illiterate, the diseased, the disabled and the backward strata of society has been engaging increasing attention of the State and the people in recent times. Public spirited persons in all walks of life are anxious to contribute their mite to alleviate human sufferings and want and promote moral and material well-being of the people. There has been a growing consciousness and desire among them to improve the lot of their fellowmen by organising voluntary social service organisations to raise them in the social and economic scale. Such organisations did not exist in the past on extensive scale as the felt needs of the people were few and far between and could be satisfied with individual acts of charity and philanthropy, which took the shape of digging wells, building step-wells, constructions of *dharmashalas*, temples and the like, and dispensing relief to the poor in times of distress, famine, fire and floods. *Annakshetra* or centres for free distribution of food to the needy and poor were also started at some places.

The social service institutions which came into being prior to integration were for the most part based on caste or religion. For this reason their activities were confined to a particular section of society. With the spread of democratic ideas, their activities were broad based and extended to the community as a whole. Even in earlier times such important organisations as Shri Anandabava Anathalaya at Jamnagar (1903), Shri Bhagvant Hindu Vyayam Mandir at Bhanvad (1937) and Shri Gulabkunvarba Infant Welfare Association at Jamnagar (1939) had organised a number of social welfare activities prior to Independence. Educational institutions, relief of the oppressed, amelioration of the condition of women, institutions for the handicapped, welfare centres, and provision of social amenities and cultural

needs of the people are some of the notable forms of social service now undertaken in different parts of the State.

Jamnagar district now has a number of voluntary institutions serving the people in a variety of ways. They not only complement and supplement Governmental efforts in many a field but also cover fields of ameliorative service which Government cannot render and which is the legitimate sphere of work of social organisations and public spirited workers. Government has recognised this basic fact and encouraged and utilised these agencies for the greater effectiveness of their own efforts. State and voluntary social service organisations have been thus playing a mutually helpful part in rendering social services in various fields and enriching public life in the district.

INSTITUTIONS OF GENERAL WELFARE

Shri Anandabava Seva Sanstha, Jamnagar—Shri Anandabava Seva Sanstha is the oldest institution in Jamnagar district doing useful service to the society. It is named after Shri Anandabava who came to Jamnagar in the year 1691 A. D. and started a *sadavrat*, by giving parched gram to the poor. His charitable activities went on expanding as Shri Anandabava was helped by other citizens of Jamnagar and continue even to this day. The place of this *sadavrat* in Jamnagar is now well-known as *Anandabava Chakla* where over 70 persons, mostly pilgrims, mendicants and beggars, belonging to all castes and creeds receive free meals everyday. This charity, started nearly three centuries ago, got further impetus in the year 1845, when Jam Shri Ranmalji constructed for this institution a building at *dholivav* which is now used as a sanitorium. The place is situated about seven km. from Jamnagar city in open surroundings and is well-known as Shri Ramarakshit Ananda Arogya Bhuvan. In the year 1888, a *pathshala*, a prayer-hall and a kitchen were added to the institution. During the *chhapna* famine, the Anandabava Anathalaya was also opened in Jamnagar. About 250 children rendered helpless during this calamity were accommodated at the Anathalaya. It has its own gymnasium, a library and a reading room. The Anathalaya accommodates about 75 inmates who are educated and given practical training in the various crafts and are properly looked after till they become self-dependent. Even the marriage expenses of girl inmates are entirely borne by the Anathalaya. In the year 1930 Shri Ramarakshit Anandguru Famine Relief Fund was started to give relief to the famine stricken areas in the district. This fund is a registered trust from which financial and other help is extended to the people at the time of natural calamities. Other institutions run by the Anandabava Seva Sanstha include a free dispensary, a high school known as Shardamandir and a Sanskrit Pathshala at Jamnagar, a dormatory at Dwarka and a boarding house for students at Kashi. The various institutions working under the aegis of the Anandabava Seva Sanstha are managed by a working committee presided over by Mahant Shri Shantiprasadji.

Shri Thakkar Bapa Gharshala, Jodiya—It was established in 1953 and named after the veteran social worker Shri Amritlal Vithaldas Thakkar popularly known as Thakkar Bapa who had devoted his life to the cause of the uplift of the down-trodden Harijans and the tribal people in particular all over India. The institution works for the uplift of Backward Classes and conducts classes to provide basic education to the young and old. It also runs a library, a handicrafts centre and a sports club for the students. A number of backward class students from Jodiya who have taken higher education or have established their career owe it to the Thakkar Bapa Gharshala.

Shri Jan-Jivan Suraksha Samiti, Jamnagar—The institution was established in 1965 in Jamnagar, when the city was in constant danger of repeated attacks by Pakistani aircrafts. It aimed at giving all types of training and facilities to the citizens to enable them to defend themselves and others in the event of any attack from the enemy. With these ends in view the *Samiti* immediately established (i) a *Shantidal* with a group of devoted young volunteers, (ii) an information centre and (iii) an *annapurna* boarding house where meals were supplied to the people at cheaper rate during the emergency.

The *annapurna* which has continued its work even after the cessation of hostilities in the border areas supplies a square meal consisting of bread, vegetable, *gur* and buttermilk everyday to needy persons at a nominal charge of 25 paise per head. From September, 1965 to July, 1966, more than 57,000 persons in the city were provided meals at subsidised rate. A total expenditure of over Rs. 35,000 was incurred for the purpose as against the receipt of Rs 14,358 for the period. The deficit is met from a permanent fund established with the help of donations received from prominent citizens and businessmen of Jamnagar.

Shri Samaj Sevak Mahavir Dal, Jamnagar—Established in 1947, the institution was originally known as Shri Nawanagar Rajya Praja Samrakshan Mahavir Dal and was given its present name in 1949. It had a total membership of 103 in 1966. The institution aims at helping the citizens of Jamnagar in a variety of ways and has a band of volunteers to help and serve the people in times of calamities such as fire, flood, famine, epidemics, war, etc. It runs a Homeopathic dispensary, a first-aid centre, a night school, a gymnasium, a library and a reading room. Occasionally, it arranges cultural programmes and discourses on religious subjects. The Jamnagar crematory managed by this institution is perhaps unique in India for its ideal atmosphere which reminds the visitor of the eternal truth that death is but a normal and unavoidable process of human life and it is only the body that dies and not the soul which is immortal. The crematory is situated in a spacious compound, enclosed by a fine garden on the river Nagmati Popularly known as *Adarsh Smashan*, it was built in the year 1892. The

Nawanagar State as well as the members of various Hindu castes took active interest in its construction and contributed freely towards its improvement. In 1941, a committee known as *Samasta Hindu Smashan Samiti* consisting of the leading citizens of Jamnagar was formed to look after the management of the crematorium. After its renovation in 1952, it has a library, a large waiting hall and a temple of Kal-Bhairav. Inside the crematorium compound are installed over a hundred statues of Shri Krishna, Rama, Hanuman, Buddha, Mahavir, Shankaracharya, Vivekanand, Swami Ramtirth, Kabir, Nanak, Sahajanand, Dayanand Saraswati, Mira, Narsi Mehta, Gandhiji, etc. Epigrams pointing out the mortal nature of human life are engraved at a number of places. Opposite the cremation ground is a large circular structure known as *Sansar Chakra* depicting pictures of the various stages of life, from birth to death.

WOMEN'S ORGANISATIONS

Women's organisations in the past were few and far between. They mainly confined their activities to providing opportunities to women to learn sewing, knitting, embroidery and the like or to get medical facilities at the time of child birth. There were hardly any attempts made to run literacy classes, reading rooms or libraries for women or to provide shelter, food, clothing, etc., to the destitute and those in distress. Of the women's organisations in the past those that deserve special mention are (i) the Jain Hindu Stree Mandal established in 1932, (ii) Sarvodaya Mahila Mandal started in 1947 and (iii) Shri Gulabkunvarba Infant Welfare Association organised in 1939. The first two were amalgamated in 1956 and named Mahila Mandal, while the last named which is the oldest existing institution of its type is still doing useful service to society.

Mahila Mandal, Jamnagar—The Mahila Mandal at Jamnagar came into existence when the two old institutions, viz., (i) Jain Hindu Stree Mandal established in 1932 and (ii) Sarvodaya Mahila Mandal established in 1947 were amalgamated in 1956. It aims at working for the social, economic and cultural welfare of women in general. It conducts regular classes for women for the *shalant* and S. S. C. examinations. The institution runs a typing class, a tailoring class, a reading room and a library and classes in vocal and instrumental music. From 1960, it has started condensed courses in accordance with the scheme sponsored by the Central Social Welfare Board for women. About 200 students take benefit of these classes every year. Students between the ages of 20 and 32 are given monthly scholarships of Rs. 20. Spinning is compulsory for all studying in the institution. The Mahila Mandal also conducts a *sanskargriha* for Harijan children.

The Mahila Mandal has a branch at Jamkhambhalia, a small town about 54 km. from Jamnagar. About 80 students attend the sewing and embroidery classes conducted by the branch.

Shri Kasturba Stree Vikas Griha, Jamnagar—Established in 1956, Shri Kasturba Stree Vikas Griha is an outstanding institution working for the uplift and welfare of women. Its many-sided activities include the following :

(a) Shelter Home for women
(b) Welfare Home for girls
(c) Children's Home
(d) Girls' Hostel
(e) Ladies' Hostel
(f) Balmandir
(g) Primary School
(h) Training College for women
(i) Handicrafts unit
(j) Social Welfare unit

The Shelter Home run by the institution provides food, shelter, clothing and education to the destitute and distressed women. More than 700 inmates including 170 children have taken benefit of the Shelter Home between 1957 and 1965. The Girls' and Ladies' Hostels which were opened respectively in 1961 and 1964 provided accommodation to over 200 students in 1965. The training college for women conducts a training course for primary teachers certificate examination. More than 100 lady teachers take advantage of this course every year. About 100 students study in the primary schools. The Handicrafts unit runs classes in tailoring, spinning, weaving and button making. The Social Welfare unit conducts welfare centres in five different villages of the district.

Shri Sarvodaya Mahila Udyog Mandal, Jamnagar—The institution was established in 1957. It was started in rented premises but it now has its own building worth about a lakh of rupees. It conducts various classes for women among which may be mentioned a *Shalant* coaching class (with 219 students studying in 1965-66), coaching classes for S. S. C. and Pre-University students, a primary school for grown up illiterate women, an adult education class, a type-writing class, a sewing class (with 226 students in 1965-66), a machine embroidery class and a music-class. It also runs a Balwadi for children and a circulating library for women. In 1965, it opened a co-operative provision store with 200 women share-holders. The members of this Mandal took an active part in collecting funds at the time of external aggressions in 1962 and 1965.

Sheth Kakubhai Jivandas Stree Hunnar Udyog Shala, Jodiya—Started in 1950, it runs a handicraft centre, a sewing class, a Balmandir, and a girls' high school. The institution also conducts coaching class in *Shalant* under the scheme of the Central Social Welfare Board. Each year about 25 women take advantage of this class. The institution runs welfare centres one each

at village Bhadar and Hadiana (Jodiya taluka), Majoth and Vankiya (Dhrol taluka), and Beraja (Jamnagar taluka). These centres conduct Balwadi, handicraft classes and adult education classes at the villages aforesaid.

Shri Gulabkunvarba Infant Welfare Association, Jamnagar—Started in 1939, Shri Gulabkunvarba Infant Welfare Association provides free medical and other facilities to expectant mothers and to infants below 3 years. Expectant mothers are supplied free medicine till one month after delivery. A family planning centre is also conducted by this institution.

YOUTHS' ORGANISATIONS

Kishor Dal, Jamnagar—Established in 1948, this institution as its name suggests, works for an all round development of young people. It had a membership of 80 persons in 1965-66. Its members act as volunteers at public functions and help people in times of natural or other calamities such as famines, floods, war, etc. The institution gives first-aid to the sick and needy and supplies old magazines and periodicals to indoor patients in public hospitals. It conducts a library and a reading room, a physical training centre, a co-operative store for its members and a stationery store which supplies stationery articles to students at concessional rates. Occasionally, it arranges exhibitions, film shows and educational excursions.

Shri Bhagvant Hindu Vyayam Mandir, Bhanvad—The Bhagvant Hindu Vyayam Mandir, perhaps the oldest of its type in the district, was established in 1937. In 1965, 190 members took part in the various activities of the institution. Besides conducting training classes in gymnasium, it arranges games competitions and runs a library and a reading room. The Vyayam Mandir has a band of trained volunteers who help in managing public meetings and functions. It arranges the 'Bajarang Shield Tournament' to encourage interest in Indian games.

OTHER ORGANISATIONS

In addition to these, there are a few other organisations functioning in smaller fields but doing useful service in their own spheres. They include the Mahila Mandal of Jamkhambhalia, the Mahila Mandal of Kalyanpur, Seva Samaj Yuvak Mandal of Jamkhambhalia, Stree Mandal, Jamnagar, etc.

Besides organisations of general welfare referred to above, there are some working for the spread of education, already dealt with earlier in Chapter XIV—Education and Culture. The important among these are : (1) Shri Vidya Mandal, Aliyabada ; (2) Shri Vidyottejak Mandal, Jamnagar ; (3) Jamnagar Education Society, Jamnagar ; (4) Hindi Samaj, Jamnagar ; and (5) Shardapith Vidyasabha, Dwarka.

Anjumane-Kutbi, Jamnagar—Among organisations working for the benefit of a particular caste or community mention must be made of Anjumane-Kutbi of Daudi Vohra community established in the year 1945. It has been doing useful service to the community by organising various activities which include (i) *Saify Grih Udyog Kendra*, (ii) Hatimi Radio and Technical Class and (iii) Training classes for women. The *Grih Udyog Kendra* provides employment to needy women of the community who prepare *papad* and other eatables, articles of crochet work, tooth powder, etc., for sale in the market. The Hatimi Radio and Technical Class gives training in radio assembling and wiring. The institution runs two separate classes for imparting training in tailoring and embroidery to women who till recently observed *parda*. These classes are now open to women of all castes and communities. In 1959, the Anjumane-Kutbi conducted a census of Daudi Vohra community residing in Jamnagar city. Another useful and important activity started by the institution since 1960 is the celebration of mass marriages, the entire expenditure on which is borne by it.

Besides these voluntary organisations functioning in this district there is a number of other organisations of national or international repute which are established elsewhere but have their branches in the city of Jamnagar. One of these is the Indian Conference of Social Work. Its district branch was established at Jamnagar in 1958. In 1959, it started (1) a home for the aged and infirm, (2) a sewing and embroidery class, (3) a play centre for children, (4) a milk centre and (5) a medical centre for distribution of medicine to the needy patients under the urban welfare project. The milk centre, the medical centre and the play centre for children were discontinued in June, 1964 at the end of the project period. The home for the aged and infirm accommodates on an average four persons. The sewing class which is very popular in Jamnagar is open to all needy and poor women. About 500 women take advantage of it every year. Similarly, about 70 women attend the embroidery classes every year.

Clubs and Gymkhanas—The district also has branches of the Indian Red Cross Society, the Lions' Club and the Rotary Club. Their aims, objectives and programmes are too well-known to need any mention here. Jamnagar city has a number of cricket clubs and gymkhanas like Ranjit Cricket Club, Summair Sports Club, Railway Gymkhana, etc., in addition to the cricket and sports clubs attached to various high schools and colleges.

CHAPTER XVIII

PLACES OF INTEREST

ABBREVIATIONS

P = Persons M = Males F = Females

G. P = Group Panchayat Mu. = Municipality V. P. = Village Panchayat

N. P. = Nagar Panchayat

Aliya-Bada—Jamnagar Taluka (P. 5,394—M. 2,794; F. 2,600); V. P.

The two villages Aliya and Bada situated on 22° 28′ north latitude and 69° 7′ east longitude on the either banks of the river Ruparel, are commonly known as Aliya-Bada which is the name of the railway station on the Viramgam-Okha metre gauge section about 16 km. east of Jamnagar. The place has gained importance since 1953 with the establishment in Aliya of a group of educational institutions called Gangajala Vidyapeeth managed by the Vidya Mandal. Darbar Gopaldas Mahavidyalaya, the first non-Government College in Saurashtra was established in Aliya by the Vidya Mandal in 1953 but closed in 1965 for want of students. Besides a Primary Teachers' Training College, there are separate centres for imparting training in agriculture and handicrafts. The institution runs a subsidised agricultural farm, a cattle-breeding farm and a seed multiplication centre. A cattle show is organised on Gopashtami (November) every year.

Amran—Jodiya Taluka (P. 3,553—M. 1,762, F. 1,791); V. P.

Lying on 22° 0′ north latitude and 70° 0′ east longitude, Amran is an ancient place of interest known for the famous shrine (*dargah*) of a Mohammedan saint called Pir Daval Shah, who was the son of Malik Mahmud Oureishi, one of the nobles of Sultan Mahmud Begada of Gujarat. His name was Malik Abd-ul-Latif and he had been given the title of Davar-ul-Mulk by the Sultan. As the Foujdar of Amran he showed much zeal in subduing the neighbouring Rajputs. He was assassinated in 1509 A. D. Thereafter he began to be considered a saint and known by the title of Daval Shah. Daval is a corruption of Davar occurring in his title of Davar-ul-Mulk. His tomb is regarded as a great centre of pilgrimage even to this day. A fair held here every year on *Zilqaad* 11 is attended by about 4,000 Hindu and Muslim participants.

(Bk) H-17—77 (Lino)

Balachadi—Jodiya Taluka (P. 427—M. 225 ; F. 202); V. P.

Balachadi is about 23 km. east of Jamnagar, on the Gulf of Kutch, the sea-shore being only 1 km. north of the village. It lies on 22° 35′ north latitude and 70° 10′ east longitude. According to one opinion its name is indicative of the high shores on the sea which are a landmark in this part of the gulf. According to another, it being the ancient burial ground of the children of Yadavas was called Balakhadi which was later corrupted into Balachadi.

It is believed that there was an *ashram* of Durvasa Rishi to the north of Balachadi beyond which the land extended for some distance. All that land and the *ashram* are now covered by sea. The sea has encroached about 5 to 7 km. to the south during the last 1,200 years. A small masonry platform on which are numerous *ling* or symbols of Mahadev is said to be visible during extraordinary low tides. On the sea-shore near Balachadi is a temple of Baleshwar Mahadev,[1] specially worshipped by Rabaris and Bharvads. Near the temple is a *pipal* tree (*ficus religiosa*), called *moksh piplo* said to have been there since the time of Lord Krishna. A fair is held near the *moksh piplo* on every Shravan Vad 13, 14 and *amavasya* or new moon day which is attended by 15,000 to 20,000 persons.

Balachadi is a fishing centre. Pearl-oysters are also found in the sea nearby. During the British rule it used to be a summer resort of the Europeans stationed at Rajkot, about 71 km. away. The Government of India have started here a Sainik School the only one of its kind in Gujarat, since July, 1961. Details about the Sainik School are given in Chapter XIV—Education and Culture.

Balambha—Jodiya Taluka (P. 5,691—M. 2,718 ; F. 2,973); V. P.

Balambha is situated about 13 km. to the north-east of Jodiya, on 22° 40′ north latitude and 70° 20′ east longitude. It has a strong citadel built, according to the *Tarikh-i-Sorath*, by Rao Desalji of Kutch in 1714 and enlarged by Meraman Khavas in 1784 A. D. after wresting it from the Rao. The mouth of the river Aji is about 10 km. from Balambha. *Naoghan Kui*,

1. The legend regarding the origin of this temple is stated as follows in the *Kathiawar Gazetteer* (1884) : "That the *ling* was originally covered with sand, and a herdsman's cow used always to go thither and pour her milk over the spot underneath which the *ling* lay. The herdsman noticing this one day followed her, and the cow, fearing that she might be prevented from offering her adoration to the Mahadev, galloped to the spot and her hoof struck accidentally against the *ling* but with such force that an impression of her hoof was left in the stone. The herdsman following dug at the spot and found that there was a *ling*. Accidentally his digging instrument struck the Mahadev and blood spurted therefrom and the mark of the flow is still visible, as is the impression of the cow's hoof. When the herdsman returned to his village and related these marvels a temple was built over it and it was installed with much devotion."

a spring of fresh water in the hillock called Bina is associated with Ra Naoghan of Junagadh. It is said that while passing through Balambha on an expedition to Kutch, Ra Naoghan, in order to quench the thirst of his army, prayed to his family goddess to aid him. She, according to the legend, directed him to thrust his spear into the ground at this place which he did and instantly sweet water sprang forth.

Balambha was the centre of the cyclonic storm of 1881 which covered north-west of the peninsula when it is said that in three days 45 inches of rain fell, washing away hundreds of mud houses and destroying many cattle. Only forty houses in the whole town had remained unaffected by the storm.

Bedi—Jamnagar Taluka (P. 10,645—M. 5,870; F. 4,775); V. P.

Bedi is about 8 km. north-west of Jamnagar to which it is linked by a metre gauge railway and an asphalt road. It lies on 22° 33′ north latitude and 70° 02′ east longitude. Bedi is an important all weather intermediate port situated on the south coast of the Gulf of Kutch about 632 km. north-west of Bombay. It has been a port for the last over two hundred years. It was first mentioned as a port in the early part of the 18th century, when it traded with ports of Kutch, Saurashtra, Konkan, Karachi and ports in the Persian Gulf.

In 1924 Jam Ranjitsinhji decided to develop it into a modern port and secured the services of an expert naval engineer from England who surveyed the harbour and examined its potentialities for development. As the report of the engineer was encouraging, Jam Ranjitsinhji spent about Rs. 75 lakhs after the development of this port. New docks were opened. Dredging of the harbour was done and the creek was deepened. A number of godowns were constructed for warehousing. Railroads and platforms were also built and extended. The quay was widened and the number of ships, launches, lighters and cranes at the port increased. Arrangements were made to enable trucks to be loaded either from godowns or direct from barges at the quay site by means of cranes provided in large number. The length of the wharf wall was increased. The dock base in area was widened eight times what it was in 1917 and the capacity of godowns was increased 35 times. All these improvements went a long way in making Bedi an important modern port on the Gulf of Kutch visited by large ocean going steamers direct from Europe and other countries and earned for it the reputation of "the Liverpool of Kathiawar."

The improvements carried out at the port helped in increasing the import and export trade of the Nawanagar State resulting in a substantial rise in its revenues. Prior to the opening of Bedi as a modern port the exports of the Nawanagar State had remained approximately stationary, with

occasional fluctuations in value. The average annual export had remained in the vicinity of 9,500 tons valued at Rs. 28 lakhs. However, from the year 1926-27 which marked the beginning of a permanent improvement in Bedi port, both tonnage and value rose sharply attaining a maximum of 62,211 tons valued at about Rs. 143 lakhs in 1928-29. A large number of articles were now exported from the Bedi port including groundnut, wool, cotton, oilcakes, *ghee*, cereals, spices, etc. Imports registered a greatly enhanced rate of increase both in tonnage and value. The total imports of the State were more than doubled in one year increasing from 52,653 tons valued at Rs. 116 lakhs in 1925-26 to 109,647 tons valued at Rs. 244 lakhs in 1926-27. The main items of imports included sugar direct from Java, foodgrains, cloth, cotton seeds, silver, metal, timber and other miscellaneous articles.

The Government of Gujarat spent nearly Rs. 46 lakhs in the Third Five Year Plan for developing this port which now handles sizeable import and export trade and helps the country earn valuable foreign exchange. It has maritime trade with all the ports of India as well as to ports of Asia, Europe and America. The main articles of import at present are dates, building materials, coconuts, etc. Bauxite, bone and bonemeal, groundnut seed, etc., constitute the main exports. The famous 'Jodiya wool' is exported from here to countries of Europe. During 1964-65, the port exported 436,436 tons of goods valued at Rs. 1,533 lakhs while the imports totalled to 27,620 tons valued at Rs. 269 lakhs. The foreign exchange earned by the port by way of exports amounted to 58 per cent of the total foreign exchange earned by all the ports in the State in 1964-65. During monsoon when the Porbandar port is closed, passanger traffic from Africa is diverted to this port. Cargo works throughout the year both by day and night as Bedi has extensive facilities for sailing vessels. The port has modern lighterage and cranage facilities with 10 transit godowns and 17 storage godowns. Being nearer to Jamnagar, Bedi is connected by air services with Bombay and Kutch. It is connected with metre gauge railway line with the important centres of trade and industry in Gujarat, Rajasthan and Northern India and is well served by roads, telegraph, telephone and wireless connections.

As fishing is a predominant industry of the place there is an ice factory and a cold storage plant with a capacity of 20 tons of fish. Bedi has a well-equipped Government Hospital. Oil-mills and salt works are the other principal industries of Bedi. It also has a workshop and a rest-house for the port staff.

Beyt—Okhamandal Taluka (P. 3,386—M. 1,719; F. 1,667); V. P.

Beyt or the island, lying on 22° 28′ north latitude and 69° 8′ east longitude is the short name by which Shankhoddhar Beyt is popularly known.

It is a narrow crooked strip of sand and rock situated in the Gulf of Kutch about 5 km. to the north of the mainland of Okhamandal and to the east of Okha port. It is said to be named Shankhoddhar as its shape resembles *shankh* the conch-shell which is found extensively on its shores, but more probably after the victory of Lord Vishnu over the demon Shankhasur in the Matsyavatar. Raman-dwip is its another name. Early Europeans called it Sanjana from a notorious pirate of the same name. It is a well-known place of pilgrimage invariably visited by pilgrims to Dwarka. In order to preserve a permanent sign of pilgrimage it was customary in the past for the pilgrims to get themselves branded here with red hot irons, for which a fee was charged. The principal shrines are the old and new temples of Shankhnaravan dedicated to Matsyavatar, an incarnation of Vishnu in the form of fish, and six others consecrated to Dwarkanath, Radha, his wives Lakshmi, Satyabhama, and Jambuvanti, and his mother Devki. The old temple of Shankhnarayan was, according to a legend, built in the *satya-yug*, in celebration of the defeat of Shankhasur. The new temple of Shankhnarayan was built about 180 years ago by the Rao of Kutch. Its architecture is similar to that of the old, which in turn resembles the temple of Dwarka though it is much smaller. The other six temples were built inside the fort wall shortly after the Muslim invasion in 1460, but were destroyed during the assault by the British forces under Col. Donovan in 1858-59. Khanderao Gaekwad renovated them in the same year. The architecture of the new temples is very plain and without any adornment. In the past conch-shells used to be exported from here to Orissa, where they were used in the manufacture of bangles. A fair is held on Janmashtami day and attended by about 1,500 to 2,000 persons from surrounding villages. It is estimated that on an average about one lakh pilgrims visit this place every year. A pilgrim tax of 30 paise per visitor is levied by the Beyt Panchayat.

Bhanvad—Bhanvad Taluka (P. 11,819—M. 5,929, F. 5,890); N. P.

Bhanvad lying on 21° 56′ north latitude and 69° 49′ east longitude is the taluka headquarters situated in hilly areas about 84 km. from Jamnagar with which it is connected by road. The Bhanvad railway station is 1·6 km. from the town. The small river Bhanvadi flows within the town and joins the river Vartu near the shrine of Indreshwar Mahadev, near the town.

Bhanvad was founded by Bhan Jethva of Ghumli and later fortified after its conquest by the Jam. To the south of the town there is an old banyan tree called 'Bhutwad' or the banyan tree where the ghost resides. According to a legend Bhan Jethva had a flower garden at the place called Bhanvadi, whence it later on came to be named Bhanvad. One Mangdo, a reputed Kathi warrior to whose charge this garden was entrusted, had promised to marry Padmavati, a Bania maiden of Patan, in the Alech hill, but was slain by robbers. His

ghost haunted the tree near which he had first met Padmavati. Later on, she being betrothed to another man, the bridal party camped under the haunted tree on their way for the marriage ceremony. With the consent of Mangda's uncle, who was in the bridal party, the ghost joined the procession and married Padmavati substituting himself for the deformed bridegroom. On return from the marriage, however, he restored the bride to her real husband and stayed back at the tree where memorial stones were erected in his honour and for the peace of his soul. Even now, the newly weds of neighbouring villages are brought to this tree to offer cocoanuts to Mangdo.

The town has a power house constructed in 1954, a taluka seed godown, a primary health centre, a veterinary dispensary and a co-operative sale-purchase union. Bhanvad is known for its *ghee* which is mainly exported to Bombay. It has two ancient temples, viz., Bhannath Mahadev and Indreshwar Mahadev. Fairs are held at Indreshwar Mahadev on Shravan Vad 8 (Janmashtami) and *amavasya* of Shravan.

Dhrol--Dhrol Taluka (P. 9,783--M. 4,930; F. 4,853); V. P.

Dhrol, capital of the former Dhrol State, is the taluka headquarters situated about 39 km. north-east of Jamnagar on the bank of river Bavani. It lies on 22° 34′ north latitude and 70° 28′ east longitude. Before the integration of States, Dhrol was a Class II State founded by Jam Hardholji, the brother of Jam Raval, who hailed from the ruling Jadeja Rajput family of Kutch. Hardholji helped Jam Raval conquer Halar and enabled him to found the Nawanagar State. Hardholji on his part conquered the territory that formed the Dhrol State in about 1539 A. D. The battle field of Bhuchar Mori near Dhrol is well-known in history for being avenue of a decisive battle between the Moghal forces and the Jam of Nawanagar in 1591 A. D. As Jam Sataji had refused to surrender the fugitive Muzaffar, the last Sultan of Gujarat, the Moghal viceroy of Ahmedabad had marched against the Jam and his allies. While the Jam himself returned to his capital after some preliminary skirmishes, the heir apparent Ajoji was slain in the battle after a valiant fight. The Moghals were ultimately victorious. The story of the battle of Bhuchar Mori has been a subject matter of much folklore and historical fiction and the *paliyas* (memorial stones) and a temple belonging to that period at the site are still there preserved as protected monuments. The fair held at Bhuchar Mori on Shravan Vad *amavasya* (August) is attended by about 8,000 persons. Other minor fairs are Janmashtami, Jesal Pir, Gebansha Pir and Nazar Mohammed Pir fairs.

The town is equipped with electricity, and has a travellers' bungalow, a hospital and a high school housed in spacious buildings. Dhrol has one oil mill (1966). Shoe-making is a well-known industry of this place.

Dwarka—Okhamandal Taluka (P. 14,314—M. 7,468; F. 6,846); N. P.

Dwarka, the headquarters of Okhamandal taluka, is in the extreme west of the Saurashtra peninsula on the Arabian Sea. It is a station on the Viramgam-Okha metre gauge railway line, about 137 km. from Jamnagar, 217 km. from Rajkot and 378 km. from Ahmedabad. It is also connected by a State highway with Jamnagar and Okha. It lies on 22° 22′ north latitude and 69° 05′ east longitude. The town of Dwarka is built on the right bank of Gomti creek which is traditionally supposed to take its rise from the village of Bhavda, about 10 km. to the eastward, which is called **Mul-Gomti.**

Dwarka is derived from *Dwar*, a door, and in ancient times its flourishing port was considered to be the gateway to the mainland. It is also called Dwaramati or Dwaravati, i. e., the city of gates. Being the adopted home and capital of Lord Shri Krishna after he gave up Mathura, it is held in such a high esteem as a place of Hindu pilgrimage that it is considered to be one of the four principal holy places or *char dham* and one of the seven ancient towns or *sapta puris* in India. It is also eulogised in the Puranas in the following terms:

> "There are five jewels in Saurashtra, namely, rivers, women, horses, the fourth being Somnath and the fifth is the *darshan* of the idol of Hari or Lord Krishna." 1

It is visited by thousands of pilgrims every year from all over India. Recognising the importance of Dwarka as a holy place of pilgrimage, the territory of Okhamandal was handed over in 1817 by the British to the Gaekwad in whose possession it continued till the merger of the Baroda State in 1949 and was finally included in Jamnagar district in 1959.

The original Dwarka, believed to be of gold, has been described in the Mahabharata and Puranas like Bhagvat Purana, Vishnu Purana, Skand Purana, Harivansh, etc. It is said that Revat, the great grandson of Vaivasvat Manu settled the town Kushasthali at this place. In order to prevent the Yadavas from being enfeebled by the continuous attacks of Jarasandh whom he had defeated seventeen times, and of Kalyavan, Shri Krishna abandoned Mathura, when Garuda found out and suggested Kushasthali as a suitable site for the new capital. Here Shri Krishna settled Dwarka on an area twelve *yojans* round, over 5,000 year ago, according to some Indian scholars It is believed that on a certain occasion when Krishna was absent from Dwarka,

1. सौराष्ट्रे पञ्चरत्नानि नदी नारी तुरंगमाः ।
चतुर्थे सोमनाथस्य पञ्चमम् हरिदर्शनम् ॥

the Salva king of Mrttikavali in Saubha led an army against Dwarka, plundered the city and withdrew unmolested. But on his return to Dwarka Krishna proceeded against the Salva chief and defeated and killed him. The Yadavas, however, did not live to enjoy the fruits of their victory. Family feuds which soon broke out brought their sway over Saurashtra to a speedy end—36 years after the Mahabharata war. The deserted Dwarka is thereupon said to have been 'swallowed' up by the sea.

The exact location of the original Dwarka is still a matter of doubt. According to some it was located at a place of that name in Kodinar taluka of the present Amreli district, while a scholar has claimed that he detected from the air the submerged Dwarka in the sea near the present site. According to another belief ancient Dwarka lies buried under the present town. Various theories are propounded to show that the original Dwarka was at the existing place, e. g., the extensive formation of sand dunes on the banks, closing up of the sea-water channels on three sides of the town, narrowing of the Gomti because of the sea-silt and visit of Dwarka by *acharyas*, like Shankar, Ramanuj, etc., devotees like Narsinh and Mira, saints like Kabir and Nanak, all of whom subscribed to the tradition that the original Dwarka existed at its present site. In any case excavations recently undertaken up to the depth of 40 feet below the level of the present town have revealed various layers of structural remains intercepted with layers of sand, silt, etc. Lime-stone blocks were found used in house floors and walls. Fragments of pottery were also discovered indicating that Dwarka had come in contact with the Roman world. These excavations show that Dwarka was inhabited before the Christian era, probably on an island formed by the waters of the Gomti creek surrounding the present site of Dwarka. Still another Dwarka seems to have arisen and prospered about the second or third century. It is believed to be the island of Barake in the Gulf of Kutch mentioned in the Periplus, an ancient Greek work. Finds of amphora sherds indicate commercial relations with the Mediterranean region. This Dwarka seems to have been buried under the sea in the fourth century, to be rebuilt in the sixth or seventh century during the reign of Chavdas.[1]

The temple of Dwarkadhish also known as Jagat Mandir is built on the north bank of the Gomti creek. Some Hindus ascribe its erection to Vajranabh, the grand son of Krishna; others affirm in the most solemn manner that it was built in one night by supernatural agency; while some historians declare it to have been constructed about 1400 years ago by Gupta Raja, a ruler on the Ganges, who is said to have invaded and subjugated Okhamandal. Architecturally the temple is constructed on the same plan and system as most of the Hindu sacred edifices of antiquity. It consists of

1. *District Census Handbook* 1961, Jamnagar

a shrine, a spacious audience hall, the roof of which is supported by 60 columns of granite and sandstone, and a conical spire or *shikhar* in height about 170 feet. The temple has seven floors. There is a shrine of Shakti Mata on the fourth storey while the fifth, reaching up to 100 feet, has the Ladwa Mandir. The length of the plinth of the temple is about 90 feet, and its breadth 20 feet. Externally the body of temple and the spire are profusely carved from base to pinnacle, but internally they are characterised by excessive plainness and simplicity of style. The shrine is elaborately ornamented and has the figure of Ganpati sculptured over the entrance.

According to a legend the original idol of Shri Krishna is now at Dakor in Kaira district. It is said that, taking pity on his old devotee, Bodano, who came for *darshan* from such a great distance on every full-moon day, the God in the form of idol went with him to Dakor in V. S. 1212. The Gugli Pujaris of Dwarka chased Bodano to recover the idol and killed him in Dakor. The widow of Bodano offered to give the equivalent of the idol's weight in gold whereupon the Guglis agreed to withdraw. By a miracle the idol became as light as a golden nose-ring which was all that the widow had. The Guglis were disappointed, but the Lord mercifully directed that they would find an exact replica of the idol in a particular well at Dwarka on a particular day. The impatient Guglis looked for the idol earlier than they were told to, and as a result, found an idol which, though similar to the original one, was smaller. It is said that this is the idol which is now enshrined at Dwarka.

The Sharda Pith of Dwarka, one of the four Maths in the four corners of India was established by Adya Shankaracharya to carry out religious activities in the *Pashchimamnaya*, i. e., the western region in recognition of its importance and antiquity as the sacred place of Hindu pilgrimage. The first head of the Sharda Pith was Mandanmishra, the famed *pundit* whom Shankar had defeated in philosophical debate, and who had adopted *sanyas* under the name Sureshwaracharya. The present Shankaracharya is the 77th in line at Sharda Pith. The Sharda Pith Vidya Sabha, an educational society sponsored by the Sharda Pith, runs an arts college and a Sanskrit Academy which carries out research and prepares scholars for the degree of Ph. D. in Sanskrit and Indology.

Other temples besides Jagat Mandir are the ancient temple of Rukmini the wife of Lord Krishna, Ranmukteshwar Mahadev, Mahalaxmi, Damodarji, Goverdhannathji and the shrines of Mirabai and Narsinh Mehta. The *Pancha Tirth* on the opposite bank of the Gomti has five sweet-water springs just near the creek of salt water. The Dwarkadhish and Rukmini temples are protected monuments believed to date back to the thirteenth century. While visiting Dwarka, the pilgrims also visit the island of Beyt, another Vaishnava place of pilgrimage about 32 km. away.

The principal festivals celebrated at Dwarka include : (i) Annakuta on Kartik-Sud 1 (October), (ii) Holi on Phalgun Sud 15 (March), (iii) Fuldol on Phalgun Vad 1 (March), and (iv) Janmashtami on Shravan Vad 8 (August).

During the *Annakuta* festival celebrated on the New Year Day, the widest assortment of all possible varieties of food dishes, prepared from the new crops, is offered to the God. On Holi, singing of *bhajans*, sprinkling of *gulal* and water of *kesuda*, etc., take place before the idol. The festival of *Dolotsav* on the Fuldol day following Holi is celebrated by swinging of the God under a bower. Janmashtami is celebrated on Shravan Vad 8 (August) to commemorate the birth of Lord Krishna in Mathura. On this day large numbers of devout Hindus from distant places come to Dwarka to have a *darshan* of Shri Krishna at the Dwarkadhish temple. The birth ceremony of Shri Krishna is observed at the temple at mid-night. The Rajkot station of the All-India Radio broadcasts a running commentary covering this ceremony which is also relayed from other stations. Mahashivratri (Magh Vad 14, February) and Bhim Ekadashi (Jyeshtha Sud 11, June), are also celebrated.

The town of Dwarka is equipped with electricity and has a number of *dharmashalas* for the visiting pilgrims. It has a high school, a hospital established over 80 years ago by the munificence of a wealthy merchant of Bombay and a cement factory of the Associated Cement Companies Ltd. Yellow earth known as *magmati* (Beltonite) is found in large quantities in Okhamandal.

The Dwarka port (Rupen) about 2 km. to the north has a powerful lighthouse. Wood and timber are the main items of imports and cement, fish, etc., of exports.

Gandhvi--Kalyanpur Taluka (P. 508--M. 260 ; F. 248) ; V. P.

Gandhvi is situated about 23 km from Kalyanpur on the north bank of river Vartu, near its confluence with the sea opposite to Miyani. It lies on north latitude 21° 30′ and east longitude 69° 10′. It was once a well-known port.

It is probably the same as Gandaba mentioned by Farishta where Bhim of Anhilvada took refuge. Nearby Gandhvi are the 'Koyal hills' (Cuckoo-hills) on the bank of river Vartu. It is said that these hills derive their name from Parvati, the wife of Lord Shiv, who having quarrelled with her husband assumed the form of a cuckoo and fled to these hills which have, ever since then in memory of her, been called the Koyal hills. The original temple of Harshad Mata crowns the hill overlooking the creek ; but as this temple is old and deserted, the original idol of Mata is installed in the temple

at the foot of the hill. It was said that when she occupied her former shrine, every vessel which sighted her shrine was wrecked. At last a merchant of Mandvi (Kutch) named Jagdu Shah, whose ships were wrecked there, performed great austerities before the Mata, and persuaded her to come down to her present temple which was built by him. She agreed on condition that he sacrificed a buffalo for every step she would take. He agreed to this and commenced to slay the animals, but she took short steps and was still a few yards away from her new shrine when all the animals had been sacrificed. The merchant then offered his wife and children as offerings and lastly himself. The Mata pleased by his devotion, restored him and his family to life and told him to ask a boon, and he prayed that his line may not be extinguished. His descendants exist to this day and the Mata no longer wrecks ships. Harshad Mata is another name of goddess Mahakali.

Ghumli—Bhanvad Taluka (P. 355—M. 180; F. 175); V. P.

Ghumli lying on 21° 53′ north latitude and 69° 48′ east longitude about 3 km. from Bhanvad was once a flourishing town and the ancient capital of Jethvas. Though it is now in a ruined condition, its remains are excellent specimens of architecture and are preserved as protected monuments. The most famous of these, the Navlakha Shiv temple consists of a shrine with a *Pradakshina marg* and a *mandap* hall with three entrances, one on each side. The one storeyed structure built of lime-stone has excellent carvings resembling those of Modhera. It was built by Bhan Jethva, the grand father of Halaman Jethva. Other remains include Ganesh Dehra, the Ramapol, the Jetha Vav, the temple near Son Kansari tank and the ruins, probably of palaces, on the Abhpura hill. These monuments belong to the pre-Solanki period, i.e., 9th to 11th or 12th centuries though the Jethvas might have reigned there earlier. Ghumli is said to have been destroyed in the 14th century by Jam Bamaniaji.

A number of interesting legends are connected with this place. One of them relates to Sati Son and Bhan Jethva. Son was a beautiful daughter of Lala Kansara, an artisan, whom Bhan Jethva intended to marry. Bhan managed to kidnap her with the help of his servant, Bhil Kumbha. Son refused his offer of marriage as she wanted to marry Rakhayat—the Commander of Bhan Jethva. It is said that Rakhayat was killed by the men of Bhan Jethva and Son who became *sati* cursed Bhan Jethva that Ghumli his capital, will be ruined.

Gop—Jamjodhpur Taluka (P. 2,017—M. 1,062; F. 955); V. P.

There are actually two villages—Mota Gop and Nana Gop close to a hill known as Gop hill. Both these villages are situated on the bank of the river Vartu, near Alech hill on north latitude 22° 2′ and east longitude 69° 56′. Nana Gop is famous for one of the most ancient temples in the region to

which Mr. Burgess assigns a date not later than the 6th century in his *Report on the Antiquities of Kathiawar and Kach* published in 1876.

The village is connected with the legend of Lord Krishna. It is said that when Krishna returned from Pragjyotishpur in Assam after liquidating the two Asura kings named Naraka and Mura, he had to be detained at this place on account of the river Vartu being in floods. The people taking advantage of the enforced leisure of Lord Krishna held a reception in his honour and annointed him with the choicest waters of holy rivers. Since then the place has been called ' Jala-Zilani ' Gop and an annual fair is still held to commemorate this event. The fair which is held on Janmashtami (Shravan Vad 8) attracts about 3,000 persons. The temple on the top of the hill is sacred to the Gopnath Mahadev. The population of Mota Gop according to the Census of 1961 was 1,739 and that of Nana Gop was 278.

Gunda—Bhanvad Taluka (P. 2,021—M. 1,020 ; F. 1,001) ; V. P.

Gunda is situated about 13 km. north-west of Bhanvad and lies on north latitude 22° 10′ and east longitude 71° 45′. It is known for the inscription of Rudra Sinha which was discovered many years ago in an old ruined well constructed by Rudrabhuti. The inscription is now removed from the well and preserved in the museum at Rajkot. The inscription reads as follows :

> " In the year one hundred and two in the reign of Raja Kshatrapa Swami Rudra Sinha, son of Raja Maha Kshatrapa Swami Rudra Dama, grandson of Raja Kshatrapa Swami Jaya Dama, great grandson of Raja Maha Kshatrapa Swami Chashtana, on the fifth of the bright half of Vaishakh, being the auspicious day on which the moon was in the Shravan Nakshatra, Ahir Senapati, Bahak's son Rudrabhuti caused this well to be constructed in the village of Rasopadra for the benefit and comfort of all animals. "

This inscription is specially valuable in that it gives the name of the son of Swami Chashtana, and the father of Rudra Dama, illegible in the Junagadh inscription. It also shows that these earlier monarchs bore the title Swami, and what is singular, alternate generations bore the titles of Maha Kshatrapa and Kshatrapa respectively.

Hadiana—Jodiya Taluka (P. 3,644—M. 1,838 ; F. 1,806) ; V. P.

Lying on north latitude 22° 35′ and east longitude 70° 15′ Hadiana is situated on the bank of river Kunkavati which flows into the little Ran of Kutch connected with the Gulf of Kutch about 5 km. away. On the bank of the river is a temple of Kashi Vishvanath. It is said that when Alagh Khan invaded Kathiawar in the reign of Sultan Ala-ud-din Khilji, he passed by this

village. On this occasion such swarms of wasps issued from this temple that his troops decamped hastily leaving behind them their kettledrums. Before leaving they are said to have defiled and spoiled the water of the well here with sulphur and it is said to be undrinkable to this day. The soil of the village Hadiana is very fertile in Halar region and this is commemorated in the following verse.

" In Sorath Supedi, in Halar Hadiana ;
In Machhu Kantha Morbi, in Kutch Kadiana ; "

The village has a fort which is said to have been built by Meraman Khavas in the 18th century.

Jamjodhpur—Jamjodhpur Taluka (P. 13,798—M. 7,071 ; F. 6,727) ; N. P.

Jamjodhpur is the taluka headquarters about 126 km. south of Jamnagar, close to the Alech hills and a railway station on the Jetalsar-Porbandar metre gauge section. It lies on north latitude 22° 30′ and east longitude 70° 35′. Cotton and groundnut are produced extensively in this area. *Ghee*, an important item of its trade, is exported from here to various parts of India. Jamjodhpur has ten oil-mills, a power house, a primary health centre and a taluka seed godown. The old fort surrounding the town is said to have been built in 1884.

Jamnagar—Jamnagar Taluka (P. 148,572—M. 77,623 ; F. 70,949) ; Mu.

Jamnagar (also called Nawanagar) lying on the north latitude 22° 28′ and east longitude 70° 7′ is the district headquarters situated on the confluence of rivers Nagmati and Rangmati. It is a junction station on the Viramgam-Okha metre gauge railway line and also connected by air services with Rajkot, Bhuj and Bombay. The city has its own bus service provided by the municipal authorities. The population of Jamnagar city has grown considerably (from 71,588 in 1941 to 148,572 in 1961) owing to migrations from Pakistan after Independence, establishment of naval and military stations and the extension of industrial activities in the city. The municipal area of the city comes to 14·43 square km. and its population according to 1961 Census is 139,692 persons which gives it a density of 9,681 persons to the square kilometre. Of the total population, 107,820 were Hindus, 29,921 were Muslims, 9,347 were Jains, 830 Christians, 587 Sikhs, 19 Buddhists and 48 persons following other religious pursuasions. Literates accounted for 71,204 persons (males-45,851; females-25,353) or 47·9 per cent of the total population.

Jamnagar was, till the formation of the United State of Saurashtra in 1948, the capital of a prosperous State called Nawnagar ruled over by the

Jams. Claiming to be the descendants of Yadavas, the Jams belong to the Jadeja Rajput race which originated from the Samas who ruled at Nagar Thatha in Sind and then migrated first to Kutch. The city was founded by Jam Raval in 1540 A. D. during the reign of Sultan Muhammad III of Gujarat and the Emperor Humayun of Delhi on the site of Nagnath Bandar which he took from the Jethvas. During the troubled times following Humayun's conquest of Gujarat, the Jams consolidated their own kingdoms. Their territory which forms a major part of Jamnagar district, was called Halavar and later on Halar, as Jam Raval was a descendant of Jam Hala, and hence was called Halani.

Jamnagar was made famous the world over by Jam Ranjitsinhji (1872-1933) popularly known as Jam Ranji, a peerless cricketer, after whom the Ranji Trophy, the national cricket tournament of India was instituted. The tradition of sports established by him has given rise to world famous cricketers from this town like Prince Dulipsinhji, Amarsing, Vinoo Mankad, etc.

Formerly Jamnagar was a walled city with several gateways built after the traditional lay-out of Gujarat towns. It, however, differs from others in that its charm lies in the combination of old and new as a result of scientific planning undertaken in 1914 by the late Jam Ranjitsinhji who endowed it with a modern look and ornamented it with imposing facades, squares, circles and broad streets laid down in a systematic manner, which has given it the name of the Paris of Saurashtra. It has also been called Chhoti Kashi (the smaller Kashi) on account of a large number of temples, the notable among them being Dwarkapuri or Dwarkadhish temple, Bhidbhanjan Mahadev, Nagnath Mahadev, Ashapuri Mata, Daooji-ni-Haveli, Shri Krishna Pranami Mandir, etc. There are also some fine mosques and Jain temples.

" The old city area is subdivided into 5 wards, but the new wards which go to make up its present limits are extensive and stretch right up to the port of Bedi. Within the fortwall area, the main bazaar and residential localities exist in the traditional pattern. The railway line which was at some distance from the former town now passes through the municipal limits and the area in between has been filled up by a large number of public buildings on either side. The grain market is a centralised area and the bazaar or the shopping area has been made subdivided into various sectors according to the commodity dealt with. Efforts have also been made to improve the residential localities by regular planning and widening the former roads and streets to the extent possible. The residential localities, as usual, are marked by functional distribution of castes and communities according to religion and occupation. Hindus and Muslims reside in separate localities, the influential and well-to-do Jain community occupying a central place near the former *darbargadh*. There has been a sort of ribbon development of the town to the north of the

railway line extending up to port Bedi, as the various industries which have recently come into existence are established on either side of the road leading from Bedi gate to Bedi Bandar. New residential areas have, however, developed towards the south on well-planned rectilinear basis in the area known as Digvijay Plots."[1]

A number of industries, large and small, have been established at Jamnagar in recent times. It has one woollen mill, one textile mill, 22 oil-mills and four salt works. There are numerous handicrafts and small scale industries, the important among which are the manufacture of nutcrackers, pen-knives, trunks, locks, soap, beads, metalware, musical instruments, buttons, stone carving, silk weaving, embroidery and textile dyeing and printing. The *kumkum*, *kajal* and *surma* of Jamnagar are famous. The pride of the place is, however, the *bandhani* (tie and dye *sari*) of which Jamnagar is the principal and most popular centre. The craftsmen of Jamnagar are well-known for weaving of *pallav*, *sari*-ends and jari brocade. Fishery is an important industry of the region and pearl-oysters are an important marine product. Gandhi Udyog Mandir, established in 1955, provides training in carpentry, tailoring, printing, etc. Jamnagar is a large business centre of whole-sale trade in groundnut, grains and garlic. Commercial activities were helped by the starting of its branch of Jamnagar by the Central Bank of India in 1928. It remained the only banking institution in Nawanagar State till 1947. After Independence other banking institutions opened their branches to cater to the growing financial needs of expanding commerce and industries in the city.

Jamnagar has training establishments of all the three defence services. It has colleges of arts, science, commerce, law and medicine. The first Ayurvedic University of Gujarat was established here in 1967. There are various places of interest worth visit in the city. These are the Solarium built in 1933, the M. P. Shah Medical College, Irwin Hospital, Government Girls High School building-a specimen of fine architecture and the Crematorium. Several protected monuments include the Lakhota, the Kotho, the sixteenth century temple of Nagnath Mahadev situated on the Nagmati river, the Kalika Mata temple, the Khambhalia gate belonging to the 19th century, a post—Chalukyan step-well and the Ra Kumbha Darbar of the mediaeval times The Lal Bungalow, the former palace of the Jam Saheb is now converted into a Government Guest House. The present residence of the ruling prince known as Pratap Vilas Palace is situated outside the city. The recently constructed town hall and the Ranjit Sagar about ten km. from the city are other important places. Some of these are briefly described below.

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1 Census of India 1961, Vol. V, Gujarat, Part I-A(i), *General Report on Census*, pp 391-392

PLACES OF INTEREST IN JAMNAGAR CITY

Lakhota and Kotho

The Lakhota and the Kotho which are now preserved as protected monuments were constructed at a total cost of Rs. 1 lakh between 1839-1845 A. D. to provide relief work for the people affected by famine. The Lakhota Palace is constructed in the middle of a tank and approached by a stone bridge. It is very spacious from within where about a thousand soldiers could carry on fighting against the attacking army. It now houses a museum described later. The Kotho (bastion) is constructed on the bank of the tank. Both Lakhota and Kotho are specimen of old architecture.

Solarium

The Solarium, named after its founder Jam Ranjitsinhji as "Ranji Institute of Poly Radio Therapy" was established in Jamnagar in 1933 at a cost of Rs. 6 lakhs under the personal supervision of late Dr. Jean Saidman of France, the first inventor of the Solarium. After the destruction of two similar Solaria in France during the Second World war this Solarium is the only one of its kind in the world. The Solarium which is mounted on a 30 feet high tower has 10 cabins equipped with necessary appliances for sun-ray treatment. To keep the cabins facing the sun, an electric motor has been attached to the tower by which the tower is made to revolve on a horizontal planes. It takes a complete round in 60 minutes and in order that sun-rays fall perpendicular on the patients, a further adjustment is made by which beds in the cabins revolve vertically. The cabins have single bed arrangements and large windows for full ventilation. Special concentrators are attached to the beds in order to concentrate the sun-rays on the patients. The Solarium is also equipped with a meteorological observatory to record atmospheric conditions. All types of radiations, X-ray, radium, sun-rays and light are utilised at the Solarium for the treatment of various diseases like tuberculosis, skin diseases, rheumatism, rickets and certain types of cancer. The treatment given at the Solarium has been proved satisfactory especially in cases of glandular tuberculosis, rheumatism, skin diseases, metabolic disorders, paralysis, etc.

Museum and Libraries

The museum, started in 1946 by the Nawanagar State, is one of the four regional museums in Saurashtra. It contains a fine collection of sculptures dating from 7th to 18th century brought from neighbouring villages of Ghumli, Pachhtar, Chotila, Pindhara and Gandhvi. There are also pictures and numismatic galleries, pottery from Saurashtra (early Christian era) and a manuscript and epigraphic gallery with copper plates and ancient inscriptions.

Another important feature is the collection of ancient earthen vessels believed to be 2,000 years old discovered at village Vasai in Jamnagar taluka. On the walls are drawn frescoes depicting various scenes from the battles fought by Jadeja kings of Nawanagar. A large picture drawn on canvass showing the battle waged between the armies of Jam Saheb of Nawanagar and the Emperor Akbar is also hung on a wall. The collection of photographs include those on sculptures and architecture of Indian Civilization since the period of Mohan-jo-dero.

The two important libraries in the city are (i) District Library and (ii) Dayaram Free Reading Room and Library.

Cremation ground or Smashan

The crematorium popularly known as *adarsh smashan* was built in the year 1892. Situated on the bank of the river Nagmati on the outskirts of the city it has become a well-known place of interest due to its ideal layout and serene appearance. It is situated within a garden with about 100 statues of Indian saints, gods and goddesses, a spacious waiting hall and a library. The crematorium is managed by the Samaj Sevak Mahavir Dal and is aptly named as *sukhdham* or ' the abode of happiness '. (For details *vide* Chapter XVII-Public Life and V. S. S. O.).

Jain Temples

There are six old Jain temples in Jamnagar, four of which are situated in the heart of the city area. The more important of these are (i) Wardhaman Shah Derasar, (ii) Raishi Shah Derasar, (iii) Adishwar Derasar and (iv) Neminathji Derasar. The construction work of the temple of Wardhaman Shah was started as far back as 1612 A. D. by two brothers Wardhaman Shah and Padamsinhji Shah of Kutch. It took nearly ten years to complete the Derasar at a cost of about Rs. 2 lakhs in those days. Raishi Shah Derasar also known as Choriwala Derasar was constructed by Shri Raishi Shah in 1592 A. D. and completed by his son in 1619 A. D. The richness of painting and sculpture of those days impresses the visitors even today. The Adishwar temple is perhaps the oldest, constructed in the year 1577 A. D. The temple of Shri Neminathji was constructed in 1592 A. D.

Parks and Gardens

Of the four gardens in the city maintained by the Municipality, (1) Jubilee Garden and (2) Kamla Nehru Park are visited by many. The Jubilee Gardan was constructed in 1947 and was later on handed over to the Municipality. The Garden, spread over an area of about 42,400 sq. feet, has a number of flower plants and trees. The Kamla Nehru Garden constructed in the

year 1957-58 occupies an area of over 46,000 sq. feet. The garden has an attractive layout with a large variety of flowers and trees.

Jodiya—Jodiya Taluka (P. 7,821—M. 3,689 ; F. 4,132) ; V. P.

Jodiya, the taluka headquarters is a minor port about 39 km. north-east of Jamnagar. It lies on the north latitude 22° 42′ and east longitude 70° 21′. It is the terminus of the Hadmatiya-Jodiya metre gauge section, a branch line from the Viramgam-Okha section of the Western Railway. State Transport bus service connects the town with Dhrol, Jamnagar, Morvi and other places. The town is surrounded by a wall with towers and there is a small interior fortlet. It was originally a fishing village, but was developed into a port by Meraman Khavas, who perceived its potentiality and by Sundarji Khatri, a native agent of the British Government to whom it was farmed. However, it has now lost its trade. The harbour, open for coastal and foreign traffic, is about 2 km. from the town and has a very little traffic. The town has a power house constructed in 1954. It has a seed multiplication farm started during the First Five Year Plan period. There is also a handicraft training institution for women. A bastion (*kotho*) constructed in Jodiya in the 19th century is a protected monument. The Gulabsha Pir Urs, held here in the month of Muharram, is attended by about 2,000 Muslims every year.

Kalavad—Kalavad Taluka (P. 9,092—M. 4,647 : F. 4,445) ; V. P.

Kalavad, the taluka headquarters about 45 km. south-east of Jamnagar lies on north latitude 22° 10′ and east longitude 70° 20′. It is famous in local legend as being the place where a Vala Rajput of the Dhank family married the daughter of a Kathi, and thus formed the present tribe of Vala Kathis.

Kalavad is a walled town with an ancient fort having ten bastions. An ancient temple of *Shitala-Mata*, the goddess of small-pox, is well-known in the surrounding area. The following *duha* in praise of Kalavad describes it thus :

That is Kalavad where the fort has ten bastions, six windows and two gates besides the great goddess Shitala at its entrance.[1]

From the temple of Shitala the town is also known as *Shitalanu Kalavad* or Kalavad of Shitala temple. The place was famous for dangari type of cotton

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1. दश कोठा छ बारीओ
बे दरवाजा जोय ।
पादर मोटी शितळा
ते काळावड होय ।

cloth which was the favourite of royal families before the introduction of the English calico. This manufacture has now entirely disappeared. Besides the taluka offices, there are a hospital, a veterinary dispensary, six oil-mills and a co-operative sale purchase union. A fair is held on the *amavasya* of Shravan at Dhingeshwar Mahadev temple attended by about 10,000 persons. Another fair though smaller, held on Janmashtami, Shravan Vad 8 (August) attracts about 2,000 people. The Balamdi Irrigation project is situated about 5 km. from Kalavad.

Khambhalia—Khambhalia Taluka (P. 20,064—M. 10,351 ; F. 9,713) ; N. P.

Khambhalia lying on north latitude 22° 12′ and east longitude 69° 44′ is the headquarters of Khambhalia taluka and the second largest town in Jamnagar District. Picturesquely situated on a rising ground, among grove of trees on the banks of rivers Ghee and Tali it is surrounded by a wall with bastions at intervals built over 300 years ago. This ancient town was formerly in possession of the Vadhels, from whom it was conquered by Jam Raval. Khambhalia was once the capital of the Jams during the time when Nawanagar was made *khalsa* by the Moghals. It is a railway junction on the Viramgam-Okha metre gauge section, 53 km. from Jamnagar with a branch line up to Salaya Port. It is connected by bus services with Jamnagar, Jamjodhpur, Bhanvad and Porbandar. The town has a considerable population of Bhatias and Lohanas, famous for their commercial enterprise. The iron-smiths of Khambhalia are renowned for their skill. Besides a power house constructed in 1954, it has several old temples like Kamnath, Ramnath, Ashapuri Mata, Jadeshwar Mahadev and Kalyanraiji, Maha Prabhuji's *bethak* and *dargah* of Ajmer Pir.

There are about ten oil-mills and two ginning factories in the town. Handloom and ivory bangles are its chief handicrafts. *Ghee*, cotton seed and groundnut are the main items of its trade. There are also a teachers' training college, a girls' high school, a public hospital, a public library and a library for women, a veterinary dispensary, a seed multiplication centre, a Government rest-house and three *dharmashalas*. A fair held at Kamnath Mahadev on the river Ghee on Janmasthami (August) attracts 12,000 to 15,000 people. A smaller fair, held on Bhadrapad Sud 5 (September) is attended by about 8,000 persons.

Kota—Khambhalia Taluka (P. 454—M. 230 ; F. 224) ; G. P.

Kota lying on north latitude 22° 10′ and east longitude 69° 44′ is about 6 km. to the south-east of Khambhalia. About 2 km. to the south-east of Kota are the ruins of a town called Kundanpur which belonged to the Chavdas. From Vikamshi, who was said to be the last Chavda ruler the place

was conquered by the Jethvas in Samvat 1370 (A. D. 1314). In the battle Vikamshi was slain, and his *paliyo* or funeral monument stands to this day facing to the south towards his enemy's capital of Ghumli. At present there are no ruins left of this ancient town except perhaps the stones of the fort wall and the Shiv temple built about 800 years ago.

Lalpur – Lalpur Taluka (P. 5,435—M. 2,793; F. 2,642); V. P.

Lalpur is the taluka headquarters lying on north latitude 22° 12′ and east longitude 70° 10′ about 39 km. South of Jamnagar on the Kanalus-Katkola metre gauge section of the Western Railway. Bus services link it with Jamnagar, Porbandar, Bhanvad, Jamjodhpur, Kutiyana, etc. Besides the taluka offices, there is a Government dispensary, a primary health centre, a veterinary dispensary, a secondary school, a rest-house and an oil-mill. A temple of Bholeshwar Mahadev situated at a distance of about 5 km. from Lalpur is a famous religious place where a fair is held every year on the Janmashtami day, and is attended by about 5,000 persons.

Machharda—Kalavad Taluka (P. 615—M. 324; F. 291); G. P.

Lying on the north latitude 22° 05′ and east longitude 70° 15′ about 57 km. south-east of Jamnagar, this village is known for a small ancient hill called Tobar Hill where a fierce fight was fought between a small force (17th Native infantry) under Major Reynolds and Captain Harris on the one hand and Vagher outlaws led by one Devo Manek on the other. Captain Hebbert and Captain La Touche, Assistant Political Agents in Kathiawar who were helping Major Reynolds, were shot dead by the outlaws, who were ultimately killed or captured. Captain Hebbert and La Touche lie buried in a small enclosure near the village, and a pillar has been erected to their memory on the summit of the Tobar Hill. A tablet in Rajkot Church commemorates these two gallant officers.

Mithapur—Okhamandal Taluka (P. 11,753—M. 6,083; F. 5,670); V. P.

Mithapur lies on north latitude 22° 27′ and east longitude 69° 5′. So named because of the large salt-chemical industry that has been located here, the town of Mithapur is situated about 19 km. north of Dwarka. It is a station on the Viramgam-Okha metre gauge railway line between Dwarka and Okha, with which it is also connected by State Transport bus services. The Tata Chemicals Limited at Mithapur is a large and important industrial concern manufacturing salts, soda-ash and other chemicals. This modern township is equipped with electricity and piped water supply. There is also a high school. The Tata Chemicals Ltd. also maintains a hospital for the workers and the public.

Modpar—Bhanvad Taluka (P. 1,115—M. 576 ; F. 539) ; V. P.

Modpar also known as Morpur is situated on a small hill near and to the east of the Barda range about 11 km. from Bhanvad on 21° 53′ north latitude and 69° 50′ east longitude. Near it is a beautiful lake called Ranasar under the Ghodalanki hill and another lake called Talala. There are some beautiful views of the hills near Modpar especially of the large hills, Dantalo and Abhpura. Till the middle of the 19th century, Modpar was famous as a cover for lions and several lions were shot in the Ghodalanki hill nearby. The lions are said to have left these hills when cannons were fired against the turbulent Vaghers in 1860 by the British force under Colonel Honner. The *Statistical Account of Nawanagar* states : "Modpar was the place where an Arab shot an English Officer without provocation, and accordingly by one of the articles of treaty concluded by the Jam in 1812 A. D. with the English Government he agreed to dismantle it. This, however, has never been done."

Nageshwar—Okhamandal Taluka (P. 332—M. 152 ; F. 180) ; G. P.

Nageshwar lying on north latitude 22° 17′ and east longitude 69° 10′ is about 17 km. north-east of Dwarka on Dwarka-Gopitalav bus route The temple of Nageshwar Mahadev is considered to be very holy as it is believed to be one of the twelve *jyotirlingas* in India, referred to as Nagesh in Darukavan. A fair is held here on Shravan *amavasya* which is attended mainly by Vaghers, the main inhabitants of Okhamandal, in large numbers. A similar fair locally known as *Rakh Pancham* fair, is held on Bhadrapad Sud 5 (September) and is attended by about 2,000 persons.

Okha—Okhamandal Taluka (P. 9,630—M. 5,327 ; F. 4,303) ; V. P.

Okha of the Okhamandal taluka. is situated on 22° 28′ north latitude and 69° 7′ east longitude on the north-western tip of Saurashtra peninsula. It is the terminus of Jamnagar-Okha metre gauge railway line, about 166 km. from Jamnagar, and connected with it by a state highway via Dwarka. The name Okhamandal is believed by some to have been derived from *Okha* (bad) and *mandal* (territory), as it was a barren land inhabited by predatory tribes known for their violent and turbulent nature and backwardness. According to another view the area was called Okhamandal after Usha or Okha, the daughter of Banasur, who married Aniruddha, the grandson of Shri Krishna, and came to live there.

The original inhabitants of Okhamandal were the turbulent Vaghers, said to have descended from an ancient tribe, called Kalas, who, along with Kabas and Modas, inhabited this region. The earliest known conqueror of Okhamandal was Shri Krishna who was succeeded by his great grandson, Vajranabh. After the decay of the Yadav power, the Kalas were again in

control of this territory from the middle of the second century, till the sixth with an interval of the ascendancy of two Syrian fugitives. By this time Kalas came to be known as Vaghers whose predatory activities made them a source of constant trouble and threat to the peace of the Kathiawar peninsula. Between the middle of the 13th and beginning of the 19th century Okhamandal passed into the hands of Hindu and Muslim rulers and was finally captured by the British when the Vagher pirates captured a British Vessel and threw an English couple overboard, in 1804.

Okha is the premier all weather intermediate port of Gujarat open both to foreign and inland traffic. It is a natural harbour without much silting and the steamers can berth straight on the wharf up to which the railway line has been extended. The port started functioning from the year 1925, though it was formally opened by Shri Sayajirao, the then Gaekwad of Baroda on the 14th February, 1926. Since then, the port has witnessed an increasing tempo of activities. In 1925 was constructed the Sayaji Pier which has a capacity of berthing two vessels on either side provided with railway siding and steam cranes to facilitate direct discharge of cargo from steamer into the wagons. To cope with the additional traffic of goods, construction of a dry cargo berth was undertaken for which an expenditure of Rs. 61·85 lakhs was incurred during the Third Plan Period. Bauxite, cement and chemicals are the important articles of exports, while mineral oils constitute the main imports. The port had the privilege of handling the maximum imports in the whole State during the year 1964-65.

The factory of the Burmah Shell Oil Storage and Distributing Company and the Port provide employment to many of the inhabitants. Okha is a well laid out town which has grown up during the last thirty years. It is equipped with electricity and piped water supply. Potable water being scarce in the area, it is supplied from a reservoir near Gadhechi, about 19 km. away. A ferry service plies between Okha Port and Beyt Shankhoddhar about 3 km. to the north.

Pachhtar—Bhanvad Taluka (P. 1,057—M. 531 ; F. 526) ; V. P.

Pachhtar lying on north latitude 21° 52′ and east longitude 69° 44′ is situated to the west and at the foot of Barda hills. It is believed to be an ancient place, and also associated with Mungi Patan, a flourishing town of the past. There are in the place, the ancient temple of Amba Mata, a Panchayatan temple constructed in the eighth century, and a stepwell called Vikia Vav all of which are protected monuments.

Pindara—Kalyanpur Taluka (P. 1,261—M. 654 ; F. 607) ; V. P.

The village lying on north latitude 22° 15′ and east longitude 69° 15′ is a minor port 26 km. from Kalyanpur and connected by State Transport bus

services with Bhatia railway station. The name of the village is said to have been derived from a *kund* (pond) called *pindatarak*, i. e., one which causes an offering of a rice-ball to float in it. The mythological story* is that the Pandavas, while on a pilgrimage for expiation of their sin of killing their own brothers and relatives in the battle of Mahabharat at Kurukshetra halted here and, according to the direction of Durvasa Rishi, bathed in the *kund* and offered 108 iron balls, which floated on the water. The Rishi thereupon gave a blessing that rice-balls (*pindas*) offered here will henceforth float in this *kund*. This, as it is said, happens only if the priest has been satisfied previously. Pindara has since then been a place of pilgrimage for the performance of the *shraddha* ceremony.

It is said that Pindara was a flourishing city in ancient times which existed before Dwarka and was called Devpuri and that great Rishi Agastya, Durvasa and others resided there. The old city was situated about 3 km. to the north, but because of the encroaching sea, it was deserted about 200 years ago for the present site There are temples of Kapalmochan Mahadev, Moteshwar Mahadev and Durvasa Rishi's *agni-kund* or place for keeping the sacred fire. It is said that the remains of old temples covered by the sea can be seen at extremely low tides.

Ran—Kalyanpur Taluka (P. 2,959—M. 1,541 ; F. 1,418); V. P.

This village lying on north latitude 20° 10′ and east longitude 69° 15′ is situated near river Dhandh and is famous for its clay. The clay called *magmati* is very useful for washing hair and for plastering the interior of houses. Ran was once famous for its iron-ore.

According to a legend the village is linked with a mythological story of Rishi Jamadagni and his wife Renuka. Once Menuka, Renuka's sister, with her husband Sahasrarjun, a king of northern India on his way to Dwarka encamped at Ran. Renuka wished to meet her sister and expressed this desire to Jamadagni. Jamadagni reluctantly consented, and with his magic power

* The story is : " while Arjun was guarding Pandavas he overheard a white calf say to its mother, a black cow, that it was destined to commit the crime of *brahmhatya* i. e., Brahmin slaying next day and asked how it could wash away its sin. The cow told the calf she would show a place of pilgrimage where it should clean its sin, and added that she too had committed the crime of Brahmin slaying and would be cleansed at the same time. Next morning the cow and calf were given by the *Rishi* to a Brahmin. As the Brahmin was tying up the calf, the calf butted him in the stomach thereby killing him and because of the sin, it became immediately black. The mother now went with the calf to the *kund* and they both bathed and came forth not only cleansed of their sin but as white as snow, excepting the tail and face which had not been covered by the water and remained black in consequence."[1] This miracle about the change of colour of the calf and cow due to a dip in the *kund* is still prevalent.

1. CAMPBELL, J. M., *Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar*, 1884, p. 613

provided her with costly dresses and a chariot drawn by splendid horses. Sahasrarjun jestingly asked Renuka that his entire camp be given an entertainment, next day. Jamadagni beseeching Indra obtained all necessary supplies from his cow 'Kamdurga'. On hearing about the powers of the cow, Sahasrarjun demanded the cow, but was refused. He tried to take away the cow by force but there issued from the cow diverse *asuras* who defended it. A great battle ensued and many fell on both sides. Meanwhile the Rishi's son Parsuram returned home. Jamadagni asked him to kill Renuka, his mother, who, according to him was responsible for all these troubles. Parsuram did so and he also killed Sahasrarjun and routed his army. Jamadagni was pleased by the act of Parsuram and restored Renuka to life. The river near the place was flooded with blood and corpses due to the battle with Sahasrarjun. So the river from the spot where it crosses the high road to Dwarka, towards the sea is called Dhandh or corpse washer.

Raval—Kalyanpur Taluka (P. 5,465—M. 2,772 ; F. 2,693) ; V. P.

Situated on the river Vartu, Raval is about 16 km. from Kalyanpur, the taluka headquarters, and connected with it by S. T. bus services. It lies on north latitude 21° 47′ and east longitude 68° 57′. Low-lying land of great extent in its vicinity is watered by the river and large crops of rice grown thereon. The variety of rice grown is known as *basmati*, *vilaspuri* and *deshi*.

Rozi—(Jamnagar Taluka)

Rozi, usually known as Rozimata is a small shrine sacred to the Charan community about 12 km. north of Jamnagar city on the southern sea-shore of the Gulf of Kutch. It occupies a very cool and healthy position which had made it a favourite summer resort of the rulers of Nawanagar State. Rozi is believed to have been named after a Charan woman who resided there. It is said that Prince Jiyoji, son of Jam Raval of Nawanagar, who was hunting here chased a Roz (Nilgai or Nylghau) which took shelter at the Charan's *nes*. The Charan woman refused to surrender it, and on its being forcibly killed, cursed its slayer who died shortly after from a fall from his horse. The woman committed *traga* or suicide and has since been worshipped there as Rozimata The shrine is held sacred specially by the ruling family and goldsmiths of Jamnagar. There is a lighthouse here which is useful to vessels bound for Bedi Port and other ports nearby.

I. N. S. Valsura, the Naval training establishment started in 1942, is situated at Rozi. It is spread over an area of 540 acres. The former ruler of Jamnagar, Shri Digvijaysinhji, gave the land and also persuaded the British Government to establish a Torpedo School here. This school gradually developed into a permanent naval electrical school that is called Valsura. Valsura is the only establishment of its type in the country. It celebrated its

silver jubilee in December, 1967. The courses conducted in this establishment vary from training for raw recruits to postgraduate courses for officers. To train up specialists, I. N. S. Valsura is equipped with a variety of equipments which are actually fitted in the ships. Here the trainees are offered every opportunity to strip, assemble and test all the equipment that they are required to use.

Salaya—Khambhalia Taluka (P. 8,768—M. 4,177; F. 4,591); V. P.

Salaya, a minor port on the Gulf of Kutch, lies on north latitude 22° 15′ and east longitude 69° 35′. It is the terminus of the Khambhalia-Salaya metre gauge section of the Western Railway, about 15 km. from Khambhalia and connected with it by bus services. The port was classed amongst the regular harbours by the Moghal Government and appeared in the list of ports in the *Mirat-i-Ahmedi* as belonging to the *Sarkar* of Islamnagar (Nawanagar). The *Kathiawar Gazetteer* (1884) described it "as probably the best port with the exception of Bombay and Karachi on the west coast of India." Since its trade was largely with Karachi the traffic has suffered a set-back on account of the partition of India in 1947. The total traffic handled at this port increased from 19,747 tons in 1963-64 to 47,885 tons in 1964-65 thus recording a rapid increase of 185 per cent in one year.

Both the shore of the mainland and the nearby islands are fringed with large coral reefs which extend along the shore to the eastward as far as the entrance to the Bedi creek. The reefs are covered with mud that kills the corals but affords nourishment to the mangrove which grows thereon. The entire shore from Nawanagar to Salaya, including the island in the gulf, is covered more or less with mangrove. This useful growth supplies the coastal population with fire-wood and cattle fodder and serves to bind together and consolidate the mud and thus reclaims to a certain extent land from the sea. The town is electrified. A scheme for piped water supply in the town has been recently sanctioned. Besides fishing, other industries include an oil-mill and salt works. There are port and customs offices and a high school run by the Panchayat.

Sikka—Jamnagar Taluka (P. 8,778—M. 4,700; F. 4,078); V. P.

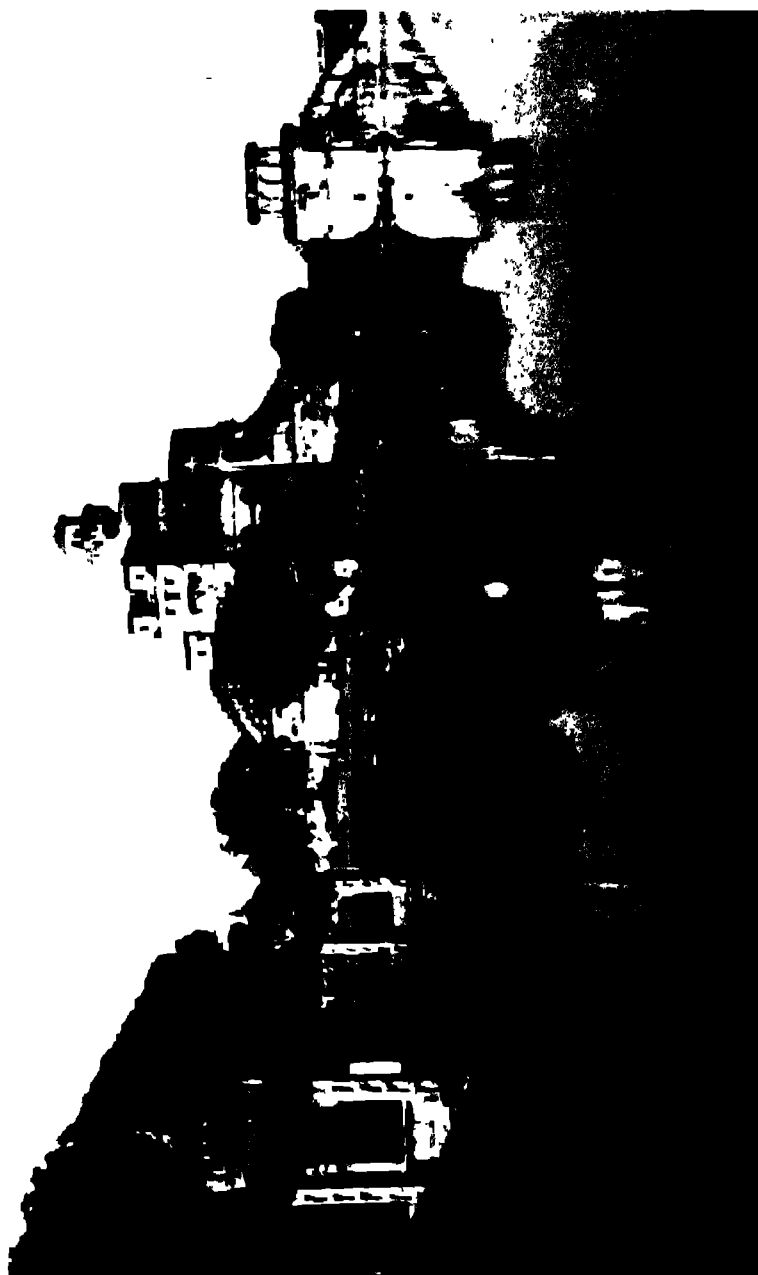
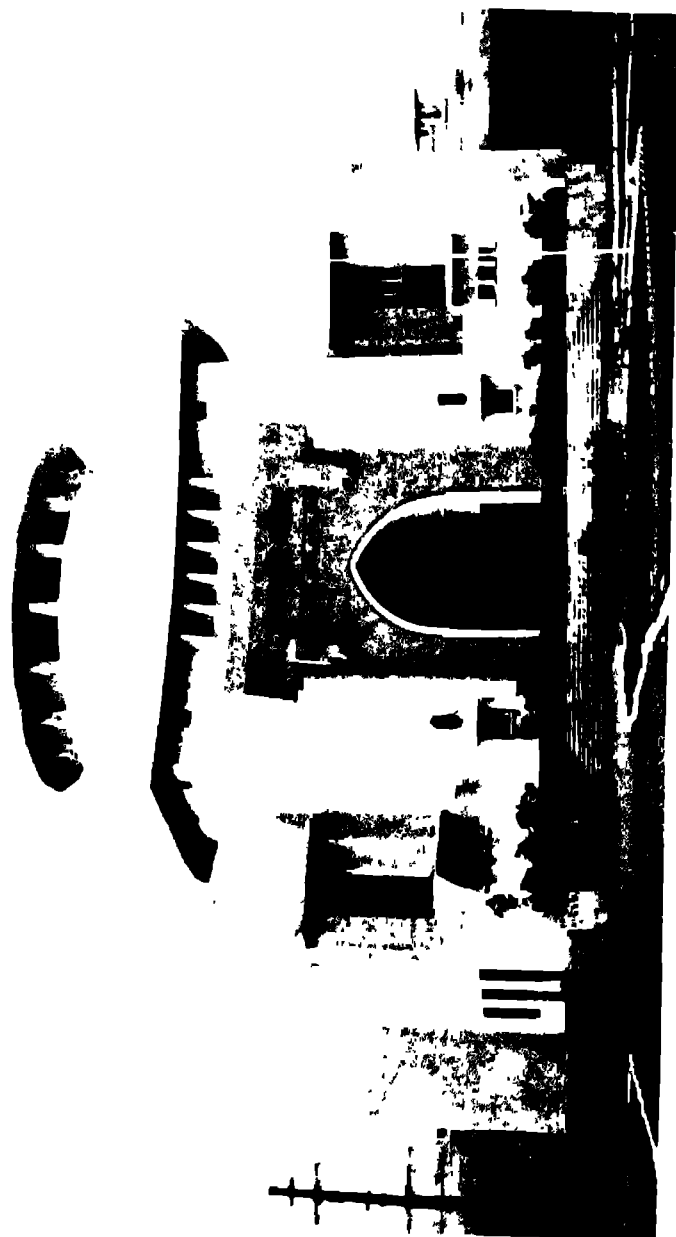
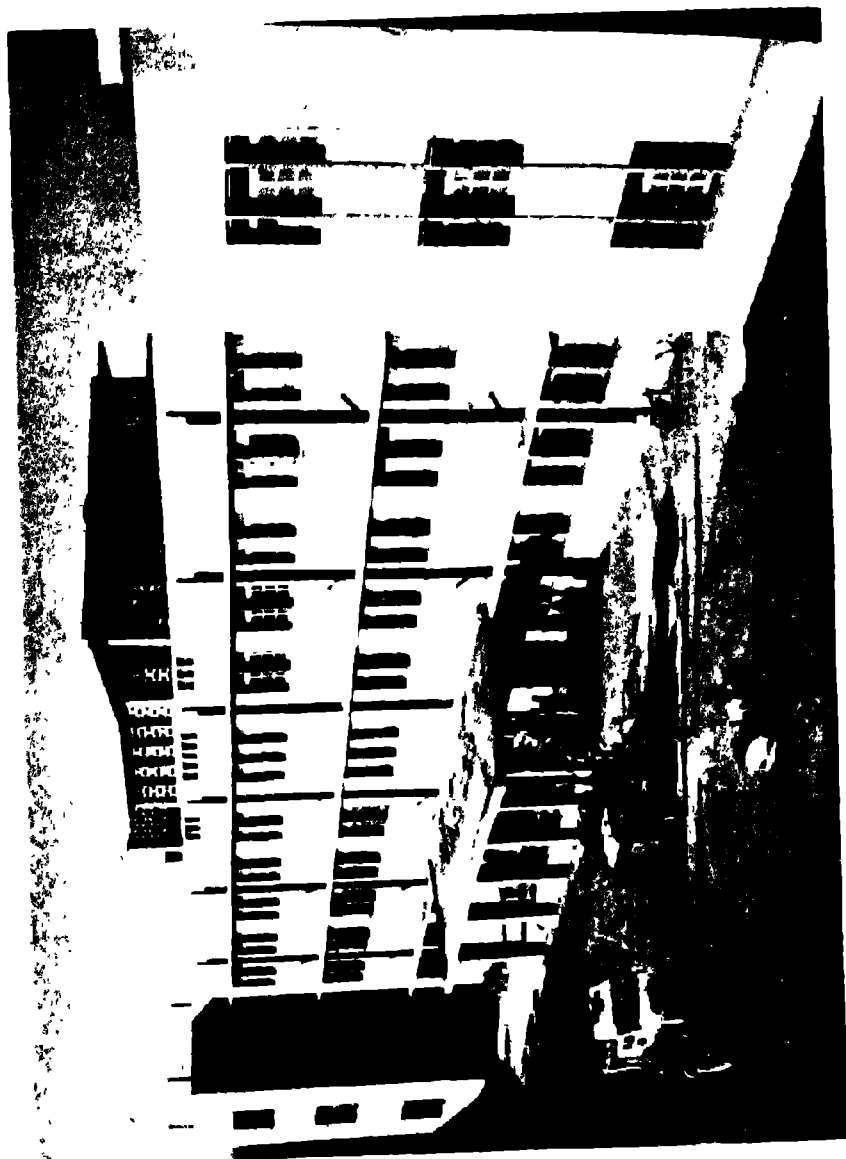
It is an open intermediate port and a terminal station on Kanalus-Sikka metre gauge railway line, 40 km. from Jamnagar by road. It lies on north latitude 22° 27′ and east longitude 70° 7′. Sikka is an important centre of fishing where two pisciculture centres have been established since 1952, besides which there is also a fishermen's co-operative society. Shri Digvijay Cement Factory with an overall capacity to produce 6·40 lakh tons of cement per year started working here in 1944. The Sikka Thermal Power Station owned by the Gujarat Electricity Board supplies electricity to Jamnagar.

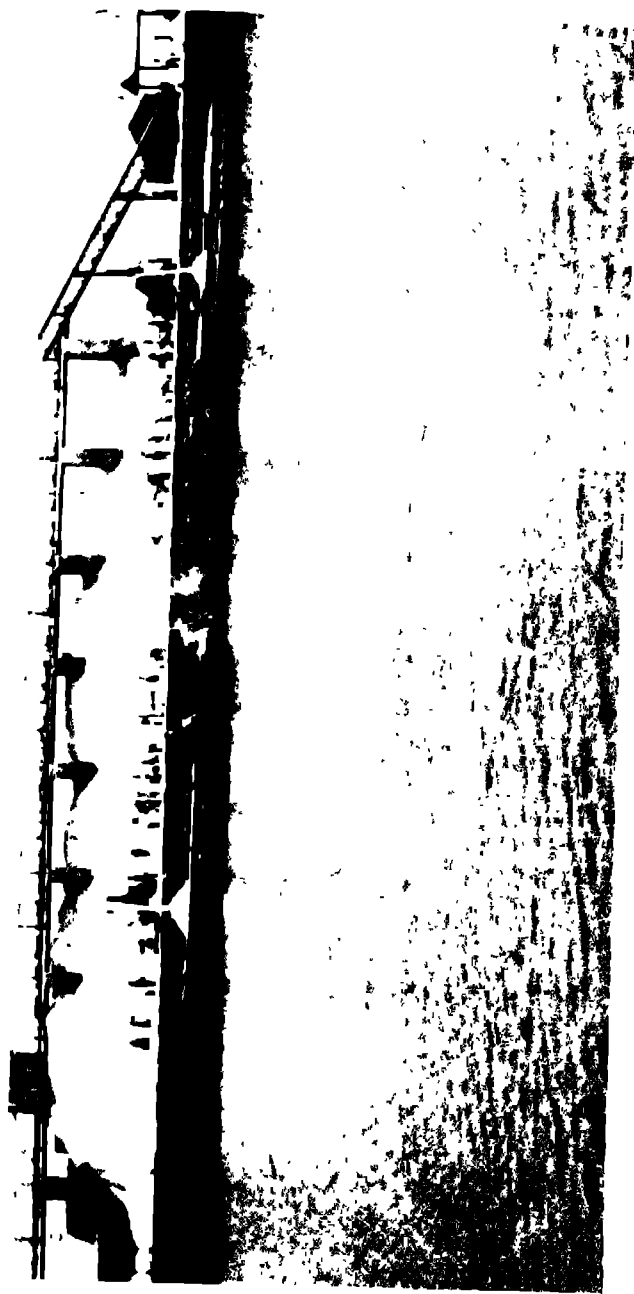
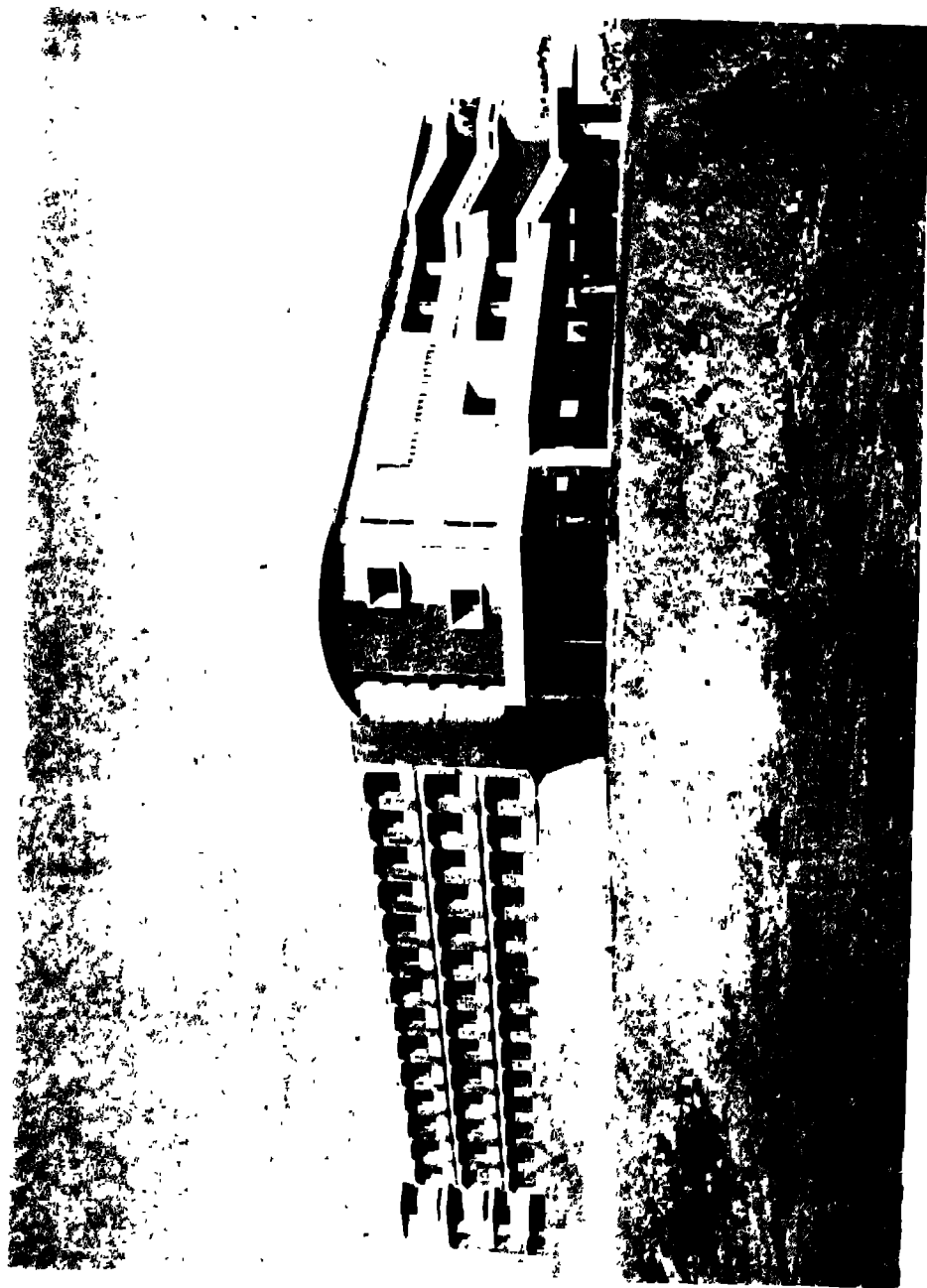
Vodisang—Kalavad Taluka (P. 447—M. 251; F. 196); G. P.

Vodisang is a small village lying on north latitude 22° 18′ and east longitude 70° 24′ about 26 km. away from Jam Vanthali railway station on the Viramgam-Okha metre gauge section with which it is also connected by bus services.

In commemoration of Ramdev Pir a fair is held here at the Ramdev Pir temple on Bhadrapad Vad 9, 10 and 11 (September) which attracts about 40,000 persons. Associated with the installation of the image of Ramdev Pir in the temple is the legend that a Rabari of Vodisang named Hira Bhagat, when he was in Pokangadh (Rajasthan) had a dream in which Ramdev Pir gave him *darshan* and promised him that he would go to Vodisang, if his idol would be installed in that village. The image was accordingly installed in the temple on Bhadrapad Vad 11 of V. S. 2014 (1958 A. D.) the year of starting the fair. Vodisang then came to be known as new Ranuja as distinguished from the original in Rajasthan. Another temple of Ramdev Pir known as Pathik Ashram is situated about three km. from Vodisang. The temple has been recently constructed and draws a large number of devotees.

PLATES

Lakhoto (city lake), Jamnagar

Kotho-Lakhoto, Jamnagar

Dhanvantari Mandir, now the Headquarters the Gujarat Ayurved University

Irwin Hospital, Jamnagar

The Solarium, Jamnagar, the only one of its kind in Asia

Loading Salt at Bedi Port, Jamnagar

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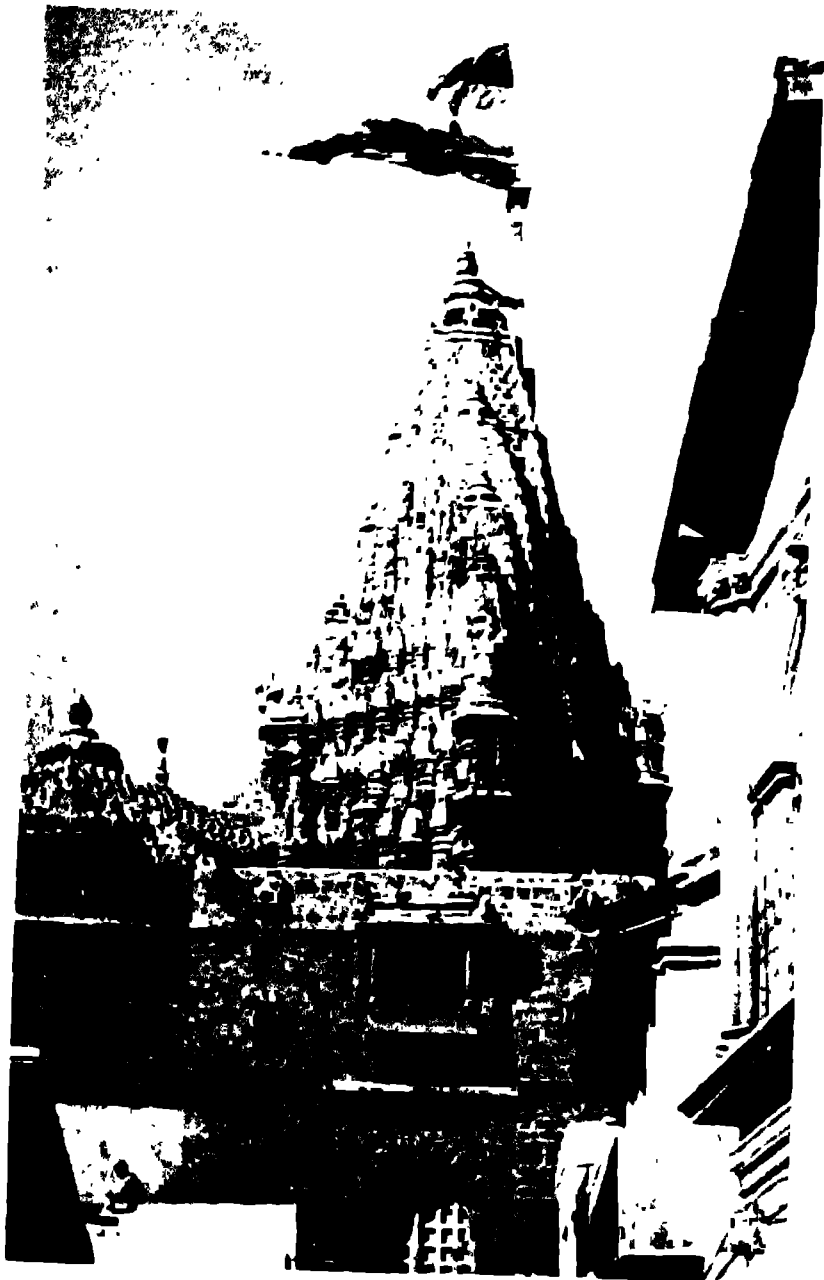
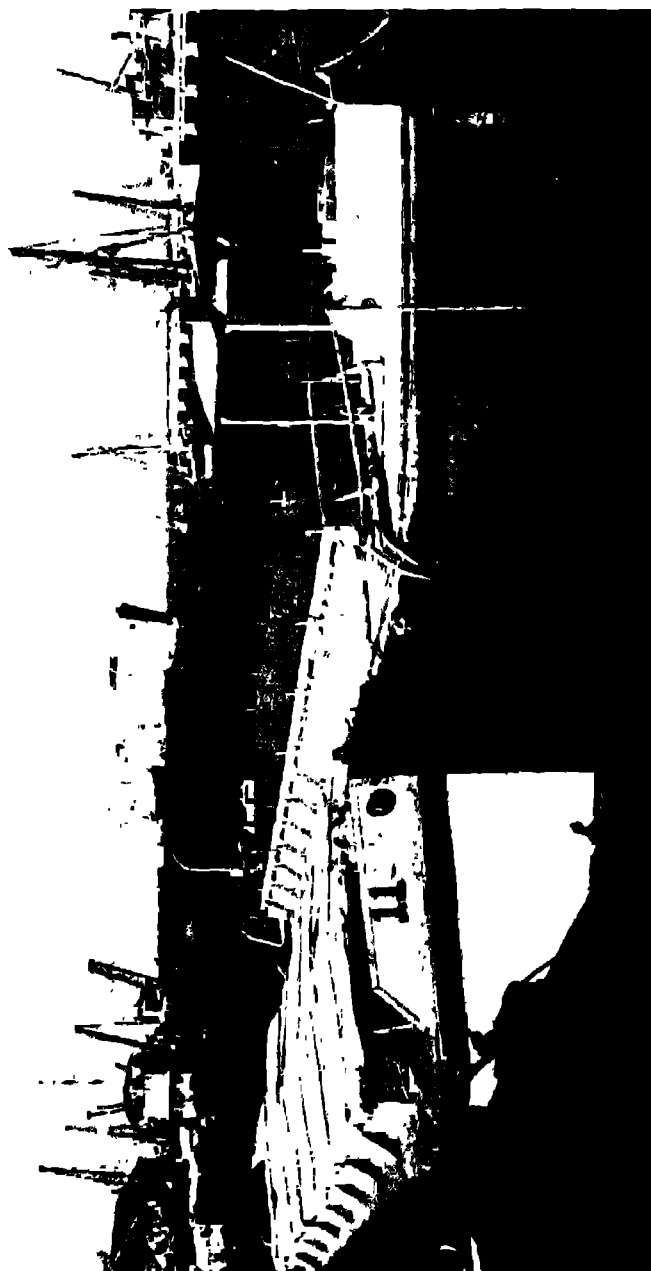

The Jagat Mandir, Dwarka

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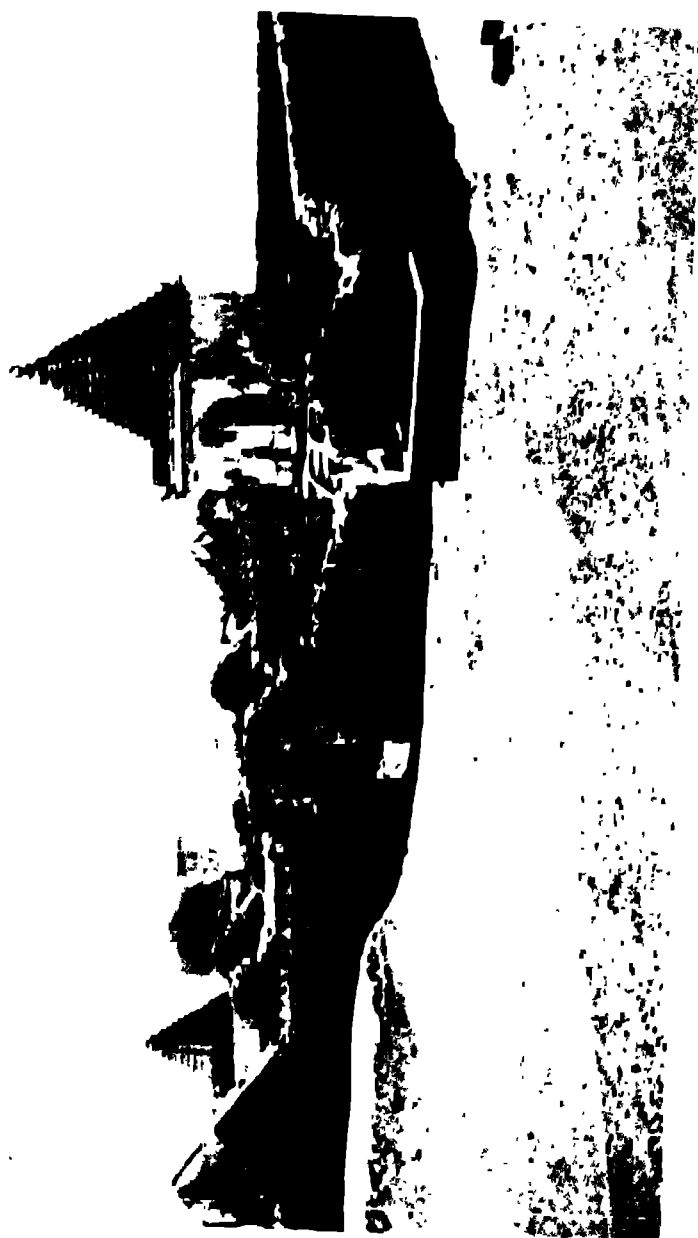
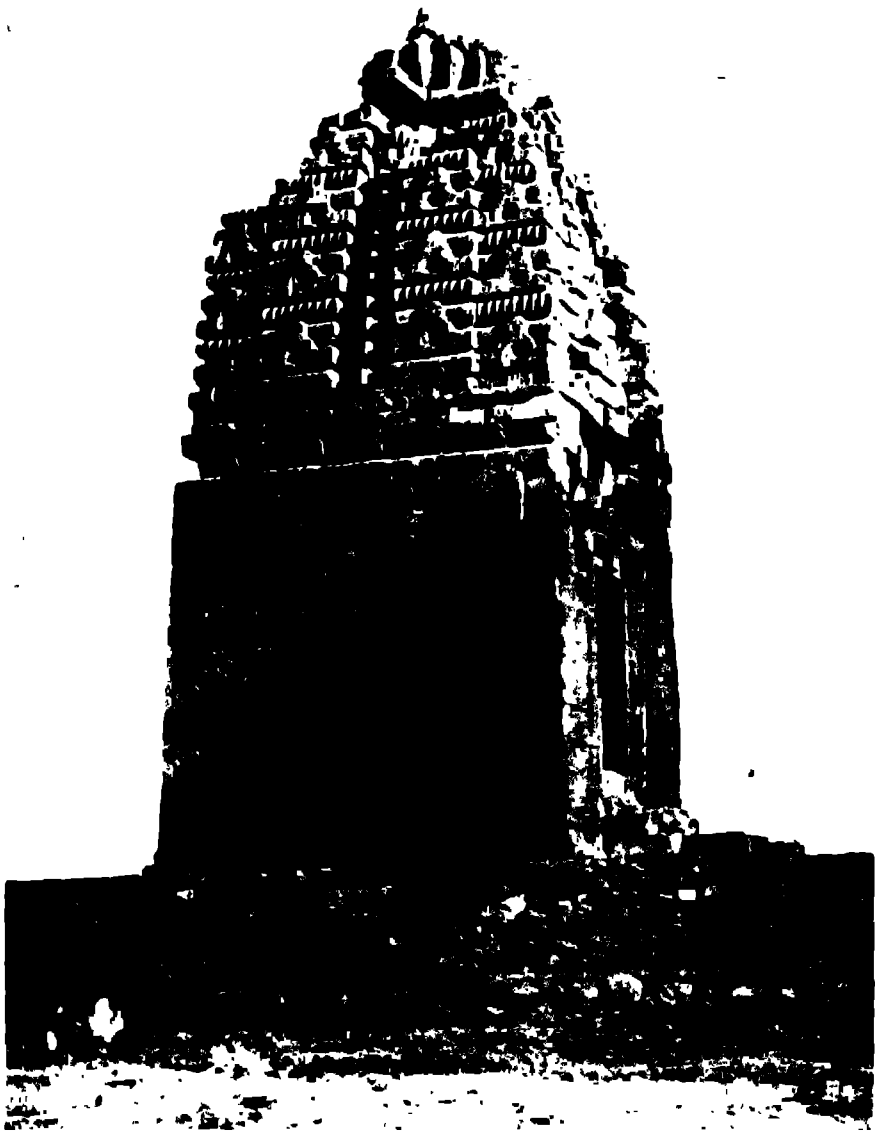
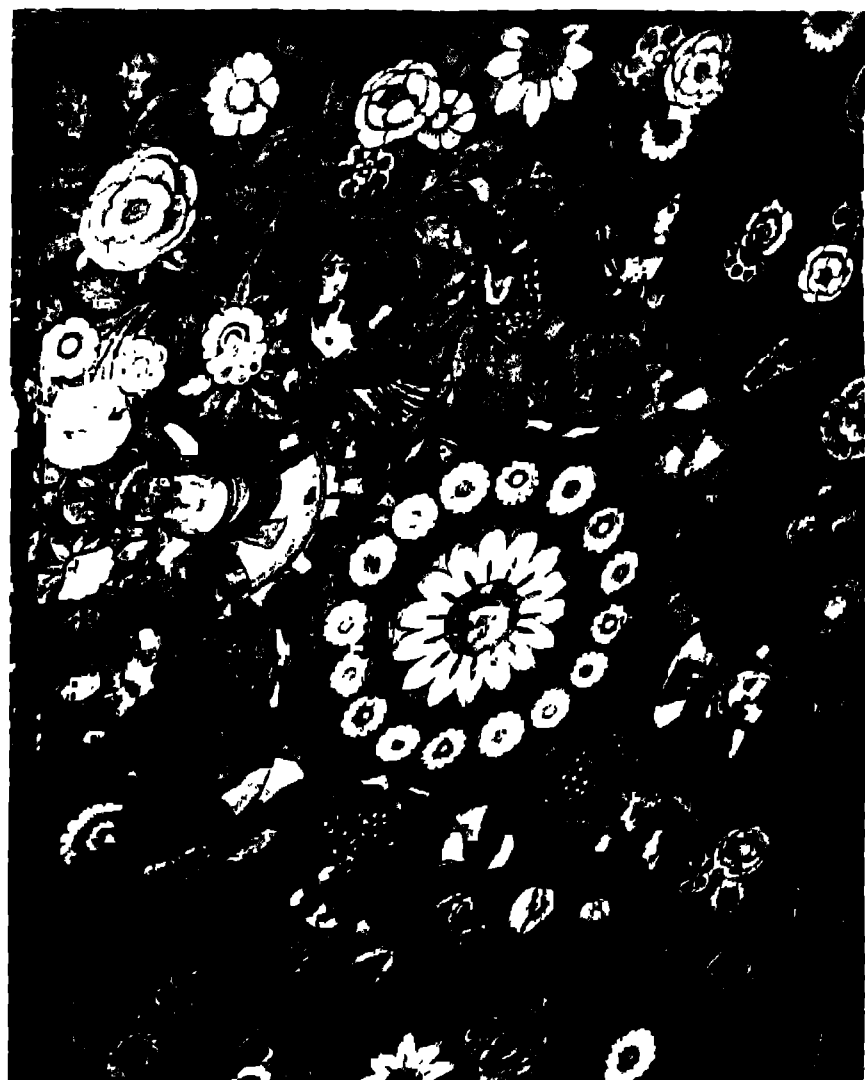
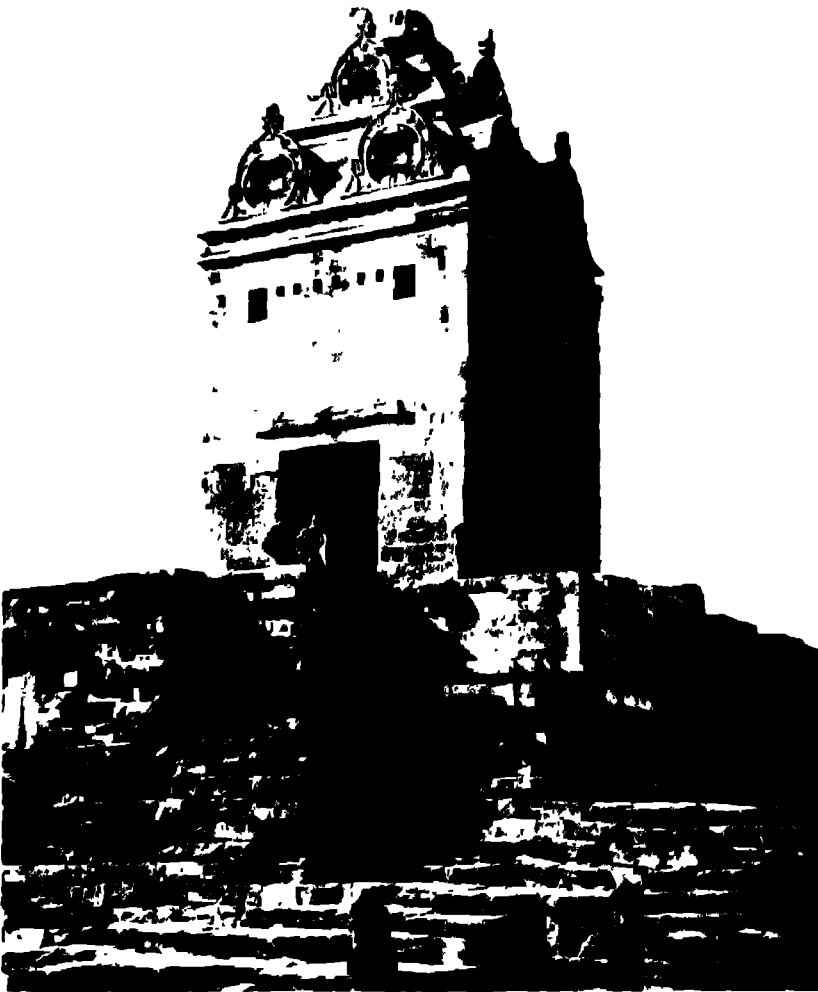
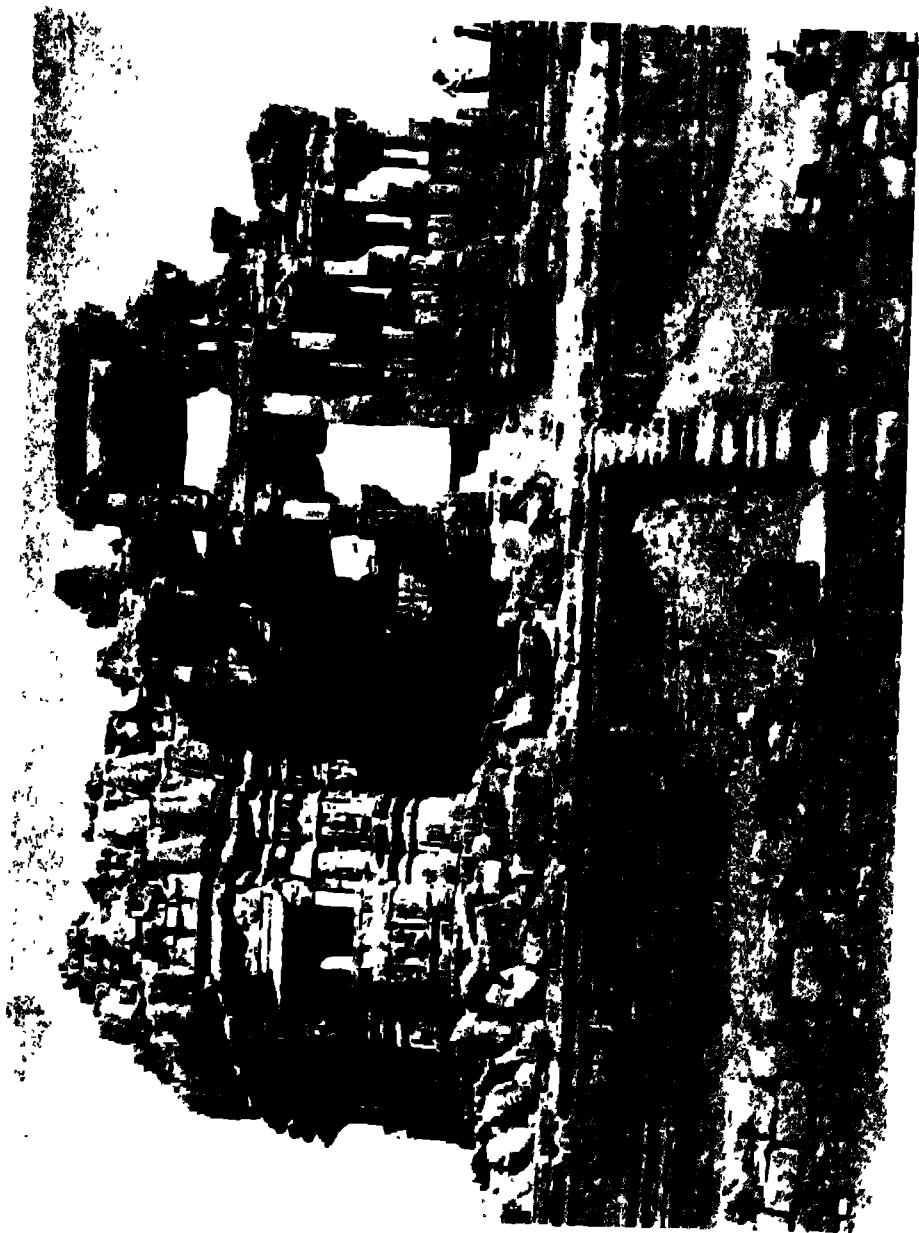
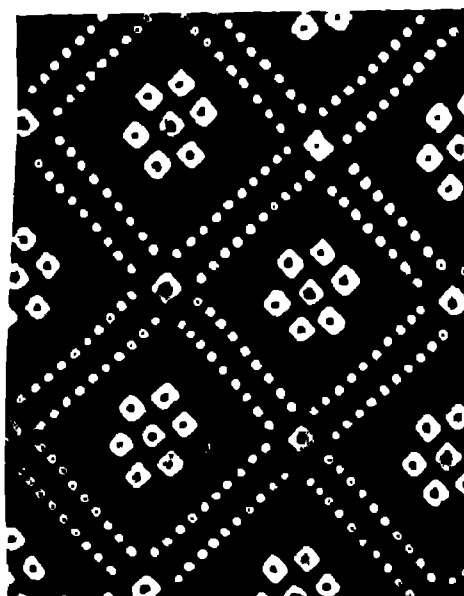
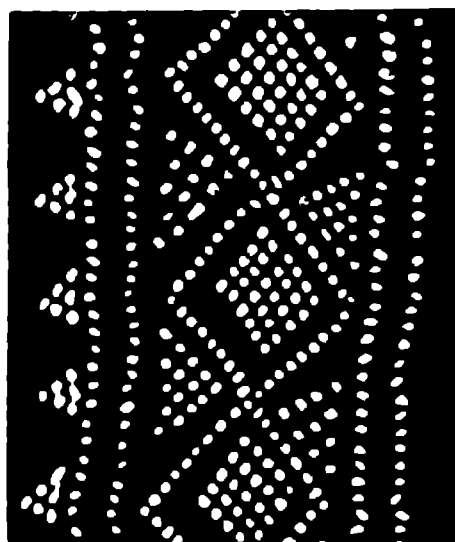

Bhu har Mori, Dhrol

A typical Vagher

Sun Temple, Pachhatar, Bhanvad Taluka

A Mural of *Raslila* in the Museum at Jamnagar

A Mural in the Museum, Jamnagar depicting battle scenes of Bhuchar Mori

The Gop Temple built in the 6th Century A D Pre-Solanki period

Bileshwar Temple. (as seen from east). Bileshwar, Bhanvad Taluka (7th Century A. D.)

A mural in the Museum (Lakhoto), Jamnagar, Jam Ranmalji hunting a Lion

The General View of Navlakha Temple, Ghumli

Navlakha Temple. Ghumli

Tikka Bhata (Dot-Design Bandhani)

Soghatna Bhata (Design of Dice in Bandhani)

(By courtesy Director of Archaeology, Gujarat State, Ahmedabad)

GLOSSARY

A

Adhar .. .. Supplementary lines drawn from the main line traversing the boundary of a village in a theodolite Survey

Advaita .. .. A doctrine of Hindu philosophy propounded by Adi Shankaracharya that there is no duality between the soul and the God, but complete identity of the individual with the Supreme Spirit

Agad tantra .. Ayurvedic toxicology

Agtar .. .. Kharif crop sown usually at the commencement of the monsoon

Akika .. .. A Muslim ceremony performed within a month after child-birth

Annakuta .. .. An array of all possible varieties of food preparations, vegetables and fruits offered to a deity on the Hindu New Year day, ***Kartik Sud*** 1

B

Badla .. .. Gold and silver wire, fine and flat, used in weaving brocade

Bagayat .. .. Garden lands

Bandhani .. .. A tie and dye *saree*

Barkhali .. .. An alienated land

Beyt .. .. An island

Bhagbatai .. .. Crop share

Bhagvata .. .. Name of Hindu Scripture

Bhaishajya Kalapna .. Ayurvedic Pharmaceutical Science

Bhakhari .. .. Wheat bread

Bhavai .. .. Folk-drama performed generally by itinerant dramatic troupes

Bhayat .. .. A cadet of the ruling family

Bhuva .. .. A priest in the temple of a goddess or among the Adivasis who, when possessed by a spirit, forecasts future events

C

Chakariat .. .. Land enjoyed by village servants in lieu of service rendered to the community

Charak Samhita .. A treatise on Ayurved by Sage Charak

Chaturmas .. .. Four months of the monsoon when devout Hindus take food once a day and observe certain vows

Chhamasi .. .. A ceremony performed in the sixth month after death

Chhand .. .. A verse

Chok .. .. An open square, either in the midst of a village or a house

C—*contd.*

Chopda pujan	Worship of books of accounts on Diwali or New Year day
Chori	The square enclosure where the marriage ceremony is performed the bride and the bridegroom take seven rounds of the sacred fire
Chudo	An ivory bangle worn by a Hindu married woman whose husband is alive

D

Dandia	Sticks used at the time of playing *ras*, a typical folk-dance of Saurashtra
Dandia-ras	Circular folk-dance with sticks
Deha Prakriti Vijnan	The science of human body and its functions
Dipmala	A tower of lights

E

Ek-Sali	On an annual basis

F

Farman	A mandate, a commandment
Farsan	Eatables usually made of gram flour fried in oil
Foujdar	A police officer

G

Garba	A sportive dance of females during Navratri days
Garbi	A sportive dance performed by males
Garbo	Perforated earthen pot in which a lamp is lighted
Gharkhed	Personal cultivation
Ghisra Vero	A cess levied on a pair of bullocks
Giras	Grass-mouthful ; Land given for maintenance by a chief to the junior member of his family, also land retained for maintenance by the original landholders
Girasdari	A system of intermediary Tenure
Girasia	Holder of Girasdari land
Grahani roga	Defective absorption and digestion in the intestines

H

Havan	Sacrifice
Hijrat	Migration associated with prophet Mohammed, who went from Mecca to Madina in 622 A. D.
Hrid roga	Diseases of the Heart

I

Inam	A kind of land tenure, gift

J

Jagir	Land and/or land revenue granted by a ruler for special services rendered
Jagirdar	One who holds land/or land revenue in *jagir*
Jirayat	Dry land
Jivai	Land granted for maintenance
Jyotirlinga	Brilliant image of Lord Shiva, one of the twelve *lingas* in India

K

Kalsi	A measure which equals 16 local maunds of 40 seers of 40 tolas each
Kalvo	A ceremony in which sweets are offered to the bridegroom by the women of the bride's party after the marriage procession stops for a brief halt at the residence of a relative of the bride
Kansar	A sweet preparation of wheat flour, *ghee* and sugar or *gur*
Kanyadan	Gifting away of daughter in marriage
Kasab	Gold or silver thread used in embroidery
Kasthaushadhi	Medicine made from the products of plants, trees, roots, etc.
Kaya Chikitsa	Diagnosis of bodily ailments
Kevaladvaita	The doctrine of absolute identity with *Brahman*
Khala	Threshing flour
Khalsa	Government land
Kheratl	Grant of land for charitable purposes
Kodiyu	An earthen lamp
Kori	A unit of Nawanagar currency before the introduction of rupee currency
Kothli Chhodaman	Fee charged by an indigenous money-lender at the time of advancing loan
Krimi roga	Hook-worm

L

Laga	Tax, fee
Lajja-homa	A religious rite performed during the marriage ceremony among Brahmins

M

Machhwo	A small country boat
Madaliyu	An amulet, a talisman
Maharatri	The great night of Mahashivratri, which falls on *Magha Vad* 14
Mangalsutra	An ornament considered auspicious and worn by a married woman
Mapla	Payment made to village craftsman
Matrukas	Local goddesses
Mayaru	The marriage booth

M—*contd.*

Mindhal	The ematic nut; a fruit of the plant *Randia dumetorum*
Mukhi	A police patel
Mulgirasias	Descendants of original proprietors of land / village, whose possession ante-dated establishment of the various States under whom they were found
Mulkgiri	Gaekwad's expeditions in Kathiawad for collecting tribute
Munj	A *khakhra* girdle worn by a Brahmin boy at the time of sacred thread ceremony

N

Naka bandi	Customs barrier or octroi outpost
Nakhuda	Captain or Commander of a ship
Natru	Widow remarriage
Nes	A settlement of cattle breeders living in forest areas of Barda Hills
Nirvan	Attainment of absolution

O

Osari	Verandah in a house
Otla	A raised platform in front of a house

P

Pachhtar	Grown late in the season, second crop
Palav	The hem or skirt of a *saree*
Panchamasi	Ceremony observed in the 5th month of pregnancy
Panchamrit	Mixture of milk, *ghee*, honey, curd and sugar
Panetar	White silken *saree* with tie and dye motifs worn by the bride at the time of marriage
Panigrahana	The ceremony in which the bridegroom accepts the hand of the bride in marriage
Pasayata	A village servant remunerated by grant of land so long as service is performed
Peet	Irrigated
Pitrukas	Forefathers
Pradakashina marg	Path of circumambulation of an idol from left to right
Prasuti tantra	The Science of Midwifery and Gynaecology

R

Rakhadi	Protective thread usually of silk tied round the wrist by a sister
Rangoli	An attractive design drawn with coloured powders
Rannade	Wife of the Sun ; a nuptial deity worshipped at the time of marriage

R—*contd.*

Ras ..	.. A sportive dance carried on jointly by males and females, which was first played by Lord Krishna
Rasaushadhi	.. Medicine which contains mercury and sulphur
Ras-Mandli ..	.. A band of persons playing the sportive dance
Ras Shastra ..	.. Ayurvedic alchemy
Rog ..	.. Disease

S

Sadavrat ..	.. A place where food cooked or uncooked is distributed free everyday to beggars and needy persons
Samanta ..	.. Vassal
Samput ..	.. A pair of earthen bowls, one placed inverted over the other and tied together in the religious ceremonies
Sanad ..	.. Charter, certificate, grant
Santi Vero ..	.. Plough tax
Saptapadi ..	.. The seven rounds taken together by the bride and bridegroom round the sacrificial fire at the time of wedding
Saree ..	.. Hindu women's chief garment draped round the body
Sathi ..	.. A servant engaged by cultivator on annual basis on payment of wages in cash and kind
Sathiya ..	.. An auspicious mark drawn in front of a house
Shaman ..	.. Tranquilization
Shami ..	.. A kind of tree used for worship on Dassera day, *prosopis spicigera*
Sharir Vijnan	.. Anatomy
Shlepada ..	.. Filariasis
Shotha ..	.. Oedema, swollen state of tissue, etc., with serous fluid
Shulva Shastra	.. Ayurvedic Surgery
Simanta ..	.. Ceremony performed during the seventh month after the first conception
Sortha ..	.. Name of a bardic metre or couplet

T

Tazias or Tabuts	.. A structure representing the dargah or tomb of Hussein at Karbala, made usually of bamboo and tinsel, carried in procession during Moharram for final immersion in water
Tirthankar ...	.. One of the 24 incarnations of God worshipped by Jains

U

Udhad Vero ..	.. A cess levied in lump
Upanayan ..	.. A sacred thread ceremony
Upashraya ...	.. A resting place for Jain monks and nuns

V

Vaje .. .. Landlord's share in kind

Varsi .. .. The first anniversary of death; the *shraddha* ceremony performed at the end of the first year after death

Vasvaya .. .. Artisans who are settled in the village by grant of land

Veth .. .. Forced labour

Vidis .. .. Pasture lands

Visaya .. .. A territorial division in vogue during the Hindu period

Vishisthadvaita .. A doctrine of Hindu philosophy propounded by Ramanuja—called qualified monism, by which the individual soul and the insensate world are the attributes of the Supreme Soul and form his body

W

Watao .. .. A commission or fee charged by a money-lender at the time of advancing loan

Z

Zortalbi .. .. Tribute collected by force by Junagadh State after the departure of Marathas from Kathiawar

BIBLIOGRAPHY

English

BOOKS, REPORTS, JOURNALS, ETC.

BOOKS

ADYE, E. H. .. *Memoir on the Economic Geology of the Nawanagar State*, 1914

BARFIWALA, C. D. .. *The Directory of Local Self-Government in Gujarat State*, 1963

BHARTIYA VIDYA BHAVAN'S HISTORY AND CULTURE OF THE INDIAN PEOPLE *The Age of Imperial Unity*, Vol. II, 1953

Do .. *The Classical Age*, Vol. III

BURGESS, JAMES .. *Antiquities of Kathiawad and Kachh, Archaeological Survey of Western India*, Vol. II, 1876

Do .. *Gazetteer of the Bombay Presidency*, Vol. IX, Part-I, *Gujarat Population—Hindus*, 1901

COMMISSARIAT, M. S. .. *History of Gujarat*, Vol. I, A. D. 1297-1298 to A. D. 1573, (1938); Vol. II, 1573-1758, (1957)

DATTA, AMLAN (EDITOR) *Paths to Economic Progress*, 1962

DEORAS, P. J. . *Snakes of India*, 1965

DHARMAKUMARSINHJI, K. S. *Birds of Saurashtra*

ENTHOVEN, R. E. .. *The Tribes and Castes of Bombay*, Vol. I, 1920

FEDDEN *Memoirs of Geological Survey of India*, Vol. XXI, Part-2; The Geology of Kathiawar

GHOSH, ALAK .. *Indian Economy, 1969*

JAMES, ROBERTSON .. *Western India, Report to the Chamber of Commerce of Manchester, Glasgow, Liverpool and Blackburn*, 1853

KAPADIA, G. A. .. *Plant-Life of Maha Gujarat*, 1950

KRISHNAN, M. S. .. *Geology of India and Burma*, 1956

KHERA, S. S. .. *District Administration in India*, 1965

LOKNATHAN, P. S. .. *Techno-Economic Survey of Gujarat*, 1963

English—*contd.*

BOOKS, REPORTS, JOURNALS, ETC.—*contd.*

MAJMUDAR, M. R. ..	*Cultural History of Gujarat*, 1965
MENON, V. P. ..	*Story of the Integration of the Indian States*, 1956
MISRA, R. R. ..	*Effects of Land Reforms in Saurashtra*, 1961
MODI, G. J. AND OTHERS	*Trade-Industry in Gujarat. Saurashtra and Kutch*, 1959
PATEL, G. D. (DR.) ..	*The Land Problem of Reorganised Bombay State*, 1957
ROY, B. C. ..	*Economic Geology and Mineral Resources of Saurashtra*, 1953
SANKALIA, H. D. ..	*The Archaeology of Gujarat*, 1941
Do ..	*Historical Geography and Cultural Ethnography of Gujarat*, 1949
Do ..	*Indian Archaeology Today*, 1962
SHAH, M. H. ..	*Jam the Great*. 1934
VAKIL, C. N. AND LAKDAWALA, D. T.	*Economic Survey of Saurashtra*, 1953
WADIA, D. N. ..	*Geology of India*
WATSON, J. W. ..	*Gazetteer of the Bombay Presidency*, Vol. VIII, *Kathiawar*, 1884
Do	*Statistical Account of Nawanagar*. 1879
WILBERFORCE-BELL, H. (CAPT.)	*The History of Kathiawar*, 1916
..	*Stone Inscriptions of the time of Rudrasena, Mulavasar, Bhavnagar Prakrit and Sanskrit Inscriptions*

REPORTS, JOURNALS, ETC.

ALL INDIA HANDICRAFTS BOARD, GOVERNMENT OF INDIA	*Handicrafts of Jamnagar*, 1963
ALTEKAR, A. S. ..	"*Six Saindhava Copper Plate Grant from Ghumli*". *Epigraphia Indica*, Vol. 26, 1941-1942
ARCHAEOLOGICAL DEPARTMENT, BARODA .	*Annual Reports*, 1934–1935–1940

English—*contd.*

REPORTS, JOURNALS, ETC.—*contd.*

BUREAU OF ECONOMICS AND STATISTICS, GOVERNMENT OF GUJARAT	*District Statistical Abstract, Jamnagar,* 1961-1962
Do ..	*Socio-Economic Review and District Statistical Abstract of Jamnagar District,* 1958-59 (1960)
Do ..	*Handbook of Basic Statistics, Gujarat State,* 1963-1964, (1966)
Do ..	*Location of Industries in Gujarat State,* 1956-1960, (1963)
Do ..	*Quarterly Bulletin of Economics and Statistics,* Vol. 2, No. 1, January-March, 1962
COMMISSIONER OF LABOUR, GOVERNMENT OF GUJARAT	*Gujarat Labour Gazettes,* January—1961, February—1964, and August—1964
CO-OPERATIVE DEPARTMENT, GOVERNMENT OF GUJARAT	*Annual Administration Report,* 1962-1963, (1966)
DESHPANDE, M. K. (I. A.S.)	*Revenue Department Manual,* Vol. I and II, Government of Maharashtra, 1961
DHAKY, M. A. .	"*The Chronology of Solanki Temples of Gujarat*", *Journal of the Madhya Pradesh Itihas Parishad, No.* 3
DIRECTORATE OF AGRICULTURE, GOVERNMENT OF GUJARAT	*Season and Crops Report,* 1960-1961, (1964)
Do	*Statistics of Area, Production and Yield per Acre of Principal Crops in Gujarat State* for the period 1949-1950 to 1963-64, (1965)
DIRECTORATE OF FISHERIES, GOVERNMENT OF GUJARAT	*Annual Administration Report,* 1963-64
DIRECTORATE OF HEALTH AND MEDICAL SERVICES, GOVERNMENT OF GUJARAT	*Annual Administration Report, Civil Hospitals and Dispensaries,* 1963
Do ..	*Annual Administration Report on Public Health,* 1961
DIRECTORATE OF INFORMATION, GOVERNMENT OF GUJARAT	*Gujarat,* 1963, 1966, 1967

English—*contd.*

REPORTS, JOURNALS, ETC.—*contd.*

DIRECTORATE OF INDUSTRIES, GOVERNMENT OF GUJARAT	*Industrial Bulletin*, Vol. I, No. I, 1962; Vol. III, No. I, 1964
Do ..	*Commercial Directory of Small Scale Units* (registered with the Directorate of Industries)
Do ..	*Annual Administration Report*, 1962-1963, (1965)
GOVERNMENT OF BOMBAY	*Report of the Fact Finding Committee for Survey of Scarcity Areas in Bombay State*, 1960
Do ..	*Annual Administration Reports on Public Health*, 1957 and 1958
Do ..	*Master Plan for Industrialisation of Bombay State*, 1960
Do ..	*The Bombay Village Panchayats Act*, 1958
Do ..	*Second Five Year Plan, Halar District*, 1958
GOVERNMENT OF BOMBAY, PUBLIC WORKS DEPARTMENT	*Port of Okha*, 1958
GOVERNMENT OF GUJARAT	*Third Five Year Plan*, 1961
Do ..	*The Gujarat Panchayats Act*, 1961, (1962)
Do ..	*Annual Administration Report of Police, Home Guards and Anti Corruption Bureau*, (including Railways), 1964
Do ..	*Annual Administration Report of Jails in Gujarat State*, 1964
GOVERNMENT OF GUJARAT, DIRECTOR OF PORTS	*Annual Traffic Review of Ports in Gujarat State*, 1964-65
GOVERNMENT OF GUJARAT, PROHIBITION AND EXCISE DEPARTMENT	*Annual Administration Report for the year* 1963-64, (1966)
GOVERNMENT OF GUJARAT, RURAL DEVELOPMENT DEPARTMENT	*Report of the Democratic Decentralisation Committee* (English Translation, Part I and II), 1960
GOVERNMENT OF GUJARAT	*Annual Administration Report of Registration Department in the year* 1965, (1967)

English—*contd.*

REPORTS, JOURNALS, ETC.—*contd.*

GOVERNMENT OF GUJARAT — *Annual Administration Report of Land Records Department for the year* 1961-62. (1966)

Do .. *The Gujarat Agricultural Lands Ceiling Act*, 1960

Do .. *The Gujarat Municipalities Act*, 1963, (1965)

GOVERNMENT OF INDIA, DEPARTMENT OF STATISTICS — *Report on the Middle Class Family Living Survey*, Vol. II, 1958-1959, (1966)

GOVERNMENT OF INDIA .. *Report of the Agrarian Reforms Commission*, 1950

Do . *Quarter inch Toposheets of the Government of India, Map Survey Department*, No. 41 F and B (Mandvi) and 41 J (Rajkot)

GOVERNMENT OF INDIA, MINISTRY OF INFORMATION AND BROAD CASTING — *India's Wild Life*, 1963

GOVERNMENT OF INDIA, REGISTRAR GENERAL OF INDIA — *Vital Statistics*, 1961

GOVERNMENT OF NAWANAGAR AND DHROL STATES — *Annual Administration Reports*, 1902-1903, 1924-1925, 1932-1933 and 1942-1943

GOVERNMENT OF SAURASHTRA — *Memorandum Presented by Government to the Part 'B' States* (Special Assistance) *Inquiry Committee*, 1953

Do .. *Saurashtra*, February-1956, Vol. I, No. 8

Do .. *Industries of Saurashtra*

Do .. *The Saurashtra Village Panchayats Ordinance*, 1949

Do *The Saurashtra District Panchayats Act*, 1956

GUJARAT ELECTRICITY, BOARD, BARODA — *Administration Report*, 1964-1965

GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION, AHMEDABAD — *Gujarat Industrial Development Corporation, Ahmedabad, 1964-65*

GUJARAT STATE FINANCIAL CORPORATION, AHMEDABAD — *Gujarat State Financial Corporation, Annual Reports for* 1961-1962 to 1964-1965

English—*contd.*

REPORTS, JOURNALS, ETC.—*contd.*

HULIZSCH, E. .. "*Palitana Plates of Simhaditya*" *the year* 255, *Epigraphia Indica*, Vol. XI, 1911-1912

HYDROGRAPHIC DEPARTMENT ADMIRALTY — *West Coast of India Pilot, Tenth Edition*, 1961 and Corrected Supplement, 1966

INDUSTRIAL CREDIT AND INVESTMENT CORPORATION OF INDIA, BOMBAY — *Industrial Credit and Investment Corporation of India*, 1966

INDUSTRIAL DEVELOPMENT BANK OF INDIA, BOMBAY — *Industrial Development Bank Report for the year*, 1965

INDUSTRIAL FINANCE CORPORATION OF INDIA, NEW DELHI — *Industrial Finance Corporation of India*, 1965

JACOB, G. L. .. "*An account of Gumli or more correctly Bhumli the ancient capital of Jetwar*" *Royal Journal Asiatic Society*, Vol. 5, 1839

NATIONAL INDUSTRIAL DEVELOPMENT CORPORATION, NEW DELHI — *National Industrial Development Corporation*, 1965-1966

SANDESARA, B. J. .. "*Origin and Evolution of Language*" Article in the *Bhavnagar Souvenir of the 66th Session of the Indian National Congress*, 1961

SANKALIA, H. D. .. "*On the origin of the Gurjaras*" *Journal Gujarat Research Society Bombay*, 1946

SAURASHTRA SMALL INDUSTRIES CO-OPERATIVE BANK LTD., RAJKOT — *Saurashtra Small Industries Co-operative Bank Ltd.*, 1964-1965

SIRCAR, D. C. .. "*Ghumli Plates of Bashkaladeva*" *Epigraphia Indica*, Vol. 31, 1955-1956

SOUNDARA RAJAN, K. V. .. "*Architectural Affiliations of early Saurashtra Temples*" *Indian Historical Quarterly*, Vol. XXXVII, 1961

Do .. "*A note on the AGE of the Gop Temple*" *Journal of the Oriental Institute, M. S. University of Baroda*, Vol. XIV, 1964

TRIVEDI, R. K. .. *Economic Trends and Projections, Census of India* 1961, Gujarat, 1965

Do .. *Fairs and Festivals, Census of India* 1961, Gujarat, Vol. V, Part VII-B, 1965

English—concld.

REPORTS, JOURNALS, ETC.—*concld.*

TRIVEDI, R. K .. *General Economic Tables, Census of India* 1961, Gujarat, Part II-B-(i), 1964

Do .. *General Report on the Census, Census of India* 1961, Gujarat, Vol. V, Part I A, 1965

Do .. *Jamnagar District Census Handbook* 1961, (1964)

Do .. *Report on Housing and Establishments, Census of India* 1961, Gujarat, Vol. V, Part IV-A, 1963

Do .. *Selected Crafts of Gujarat, Census of India* 1961, Gujarat, 1967

Do .. *Tables on Scheduled Castes and Scheduled Tribes, Census of India* 1961, Gujarat, Part V-A, 1964

Do .. *Village Survey Monograph, Pachhatardi, Census of India* 1961, Gujarat

.. *The Bombay Treasury Rules*, 1960, Vols. I and II, 1960

.. .. *Western India States Agency Report*, 1931, Part-I

.. .. "*Stone Inscription of the time of Rudrasinha*" *Epigraphia Indica*, Vol. 16

Gujarati

BOOKS

BHAVE, VINOBA .. *Bhoodan Yagna*, 1958

DESAI, S. H. .. *Saurashtra-no-Itihas*, 1957

DIRECTORATE OF INDUSTRIES, GOVERNMENT OF GUJARAT *Audyogic Ayojan, Jamnagar Jillo*

DIRECTORATE OF INFORMATION, GOVERNMENT OF GUJARAT *Pragati-na-Panthe, Jamnagar Jillo* 1961, 1962 and 1967

KALELKAR, DATTATRAYA BALKRISHNA *Jeevta-Tahevaro*, 1930

KOTAK, DAHYABHAI .. *Saurashtra-ni-Alagari Komo*, 1950

Gujarati—concld.

BOOKS—concld.

PARMAR, JAYMAL .. *Aapni Lok Sanskriti*, 1957

RATANU, MAVDANAJI BHIMAJIBHAI *Shri Yadu-vamsa-prakash ane Jamnagar-no-Itihasa*, Kalawad, Navanagar State, A.D. 1934

SAURASHTRA BACKWARD CLASS WELFARE BOARD, RAJKOT *Saurashtra-ni-Pachhat Komo*, Part-3, 1959

SHASTRI, H. G. .. *Maitraka-Kalin Gujarat*, Part-I and II, 1955

REPORTS, JOURNALS, ETC.

CHAUHAN, P. M. .. *Panchayat Dharo* (Gujarat Panchayat Adhiniyam) 1961, (1963)

GOVERNMENT OF GUJARAT, (KAPOOR, H. K. L. AND SHAH, S.) *Jilla Panchayat-na-Karmcharigan-ni-Punarrachanano Ahewal*, 1964

GOVERNMENT OF GUJARAT *Shaher Sudharalo no Varshik Vahivati Ahewal*, 1960-1961

Do .. *Triji Yojnama Pachhat Varga Kalyan*, 1965

Do .. *Lokshahi Vikendrikaran ane Gujarat Panchayat Dharo*, 1961 *ni Ruprekha*, 1962

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